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ABSTRACT

Selection of new curriculum programs on the basis of cost and effectiveness requires a careful process of identifying needs, establishing program selection criteria, analyzing and comparing alternative programs, and selecting the most appropriate programs. This document presents techniques and worksheets for use at each stage of this process. A project manager's guide designed to assist the leader of the program selection committee is included as an appendix. (Author/PGD)

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Selecting A Curriculum Program: Balancing Requirements And Costs

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CURRICULUM PROGRAM SELECTION:
A COST-EFFECTIVENESS APPROACH

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June 16, 1975

Research for Better Schools, Inc.
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OVERVIEW

This handbook is designed to help school district personnel select a new curriculum program on the basis of considerations of cost and effectiveness. "Effectiveness" is used here to mean the extent to which a curriculum program is expected to produce positive effects. The process presented in this handbook involves identifying goals, establishing criteria for program selection, gathering cost and effectiveness information, analyzing and comparing programs, and selecting the most appropriate of the programs being considered.

Although this selection process can be carried out by a single individual, it is strongly recommended that it be undertaken by a group. The group should include approximately six people — teachers or curriculum coordinators for the subject area involved, principals, and central office administrators. If a group effort is planned, one person should be assigned to act as "Project Manager." This person will be responsible for coordinating your curriculum selection project. Opportunities for group discussions are provided to ensure that different points of view are considered and that the final selection of a program reflects a consensus of group opinion.

Four major tasks are involved in the program selection process described here. Each of these tasks is presented in a separate unit. An Appendix, the Project Manager's Guide, is provided to detail the special activities the Project Manager will undertake to facilitate the group effort. It is recommended that the Project Manager read the entire handbook before reading the Appendix.

Unit 1 – Identifying Goals, Screening Criteria, and Programs

This unit explains how to either summarize the results of previous planning efforts or to perform these initial tasks if you have not done so already. The activities discussed are: (1) analyzing your current situation and developing a program goal statement, (2) specifying general screening criteria to be used in selecting several suitable programs, and (3) identifying from three to seven curriculum programs that meet the screening criteria established.

Unit 2 – Establishing Selection Criteria

This unit presents an approach you can follow to develop a set of more specific selection criteria together with specific questions to be answered for each criterion in gathering information on alternative programs.

Unit 3 – Analyzing Alternative Programs

This unit describes how you can gather detailed cost and effectiveness information on each of the alternative curriculum programs being considered.

Unit 4 – Comparing Alternatives and Selecting a Program

This unit is designed to enable you to compare the programs being analyzed in terms of the extent to which they satisfy each of your selection criteria. The results of this comparison provide the basis for your final selection of a specific program.

Appendix – Project Manager's Guide

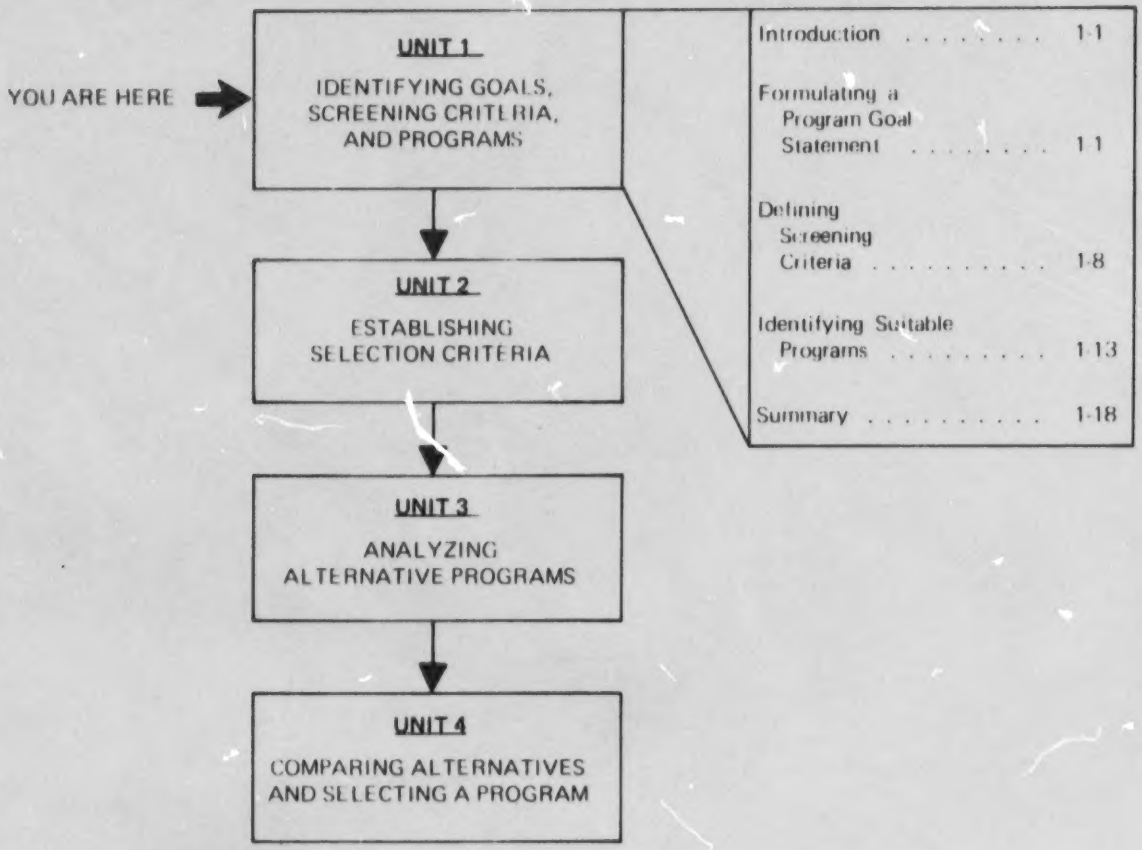
This appendix provides information on specific planning activities, i.e., developing time and cost estimates and coordinating the overall project. It also provides checklists which the Project Manager can use to monitor and coordinate the performance of the four major tasks involved.

Worksheets, information sheets, and checklists are provided on pink pages. Exercises which can be used to practice various tasks are on green pages. Where appropriate, the completed worksheets or information sheets may be detached for easy reference.

UNIT 1

IDENTIFYING GOALS, SCREENING CRITERIA, AND PROGRAMS

SEQUENCE OF UNITS



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INTRODUCTION

The activities performed in working through this unit initiate the cost-effectiveness procedure and provide the groundwork for all of the activities outlined in the following units. Upon completing Unit 1, you will have decided upon program goals and identified three to seven programs that appear to provide alternative ways of reaching those goals. Unit 1 is divided into three sections: the first section presents a way of stating the curriculum changes desired by developing a program goal statement; the second section enables you to specify the general screening criteria to be used in identifying several suitable programs; and the third section suggests a way to identify curriculum programs that meet the general screening criteria established. The program goal statement should specify what improvements you want to make in terms of the situation in your district. On the basis of your goal statement, you will formulate several screening criteria which can be used to identify any programs which warrant further consideration. The programs thus identified will be those on which you will eventually gather and compare cost and effectiveness data.

A brief discussion of the activities mentioned above has been provided here to enable you to gather the information needed before proceeding with your cost-effectiveness analysis. More detailed instructions for carrying out these activities can be found in another RBS product, **Curriculum and Instruction.**

FORMULATING A PROGRAM GOAL STATEMENT

The importance of formulating specific goals as the first step in any attempt to change a curriculum program cannot be overemphasized. Such goals are needed if the search for a new program is to be effectively directed. Your program goal statement should clearly specify exactly what you want to accomplish with a new curriculum program. Only after such goals have been defined can the various programs which represent alternative ways of accomplishing those goals be evaluated with regard to cost and effectiveness. An incomplete or ambiguous goal will seriously limit the usefulness of the curriculum program selection process. You cannot implement this process to select the "best" available program unless you know what you want to accomplish. Your first step, therefore, is to formulate a program goal statement. This statement must provide an answer to the question, "What do you want the new curriculum program to accomplish?" The sample answer below provides information on the curriculum area, the pupils involved, and specific program goals.

Curriculum Area: The new curriculum program should teach

Elementary mathematics with an introduction to basic algebra.

Pupil Population: The new program should be appropriate for

Number of Pupils: **50 pupils**

Age/Grade: **5th and 6th grade pupils**

Characteristics: **Gifted pupils**

Program goals: The new program should:

1. **Allow the pupils to work independently while learning the basic concepts and skills of algebra.**
2. **Allow each pupil to work at his or her own pace.**
3. **Provide stimulating exercises or projects to encourage pupil interest in pursuing advanced algebra.**

If you are ready to formulate a program goal statement which includes all of the necessary details, turn to page 1-7 and complete information Sheet 1. Otherwise, continue reading.

DESCRIPTION OF CURRENT SITUATION

One of the best ways to approach the formulation of a program goal statement is to analyze the present situation in an attempt to identify any needs which are not being fulfilled. Your program goals can then be formulated on the basis of meeting the needs identified. Begin with a description of the present situation which includes information on:

1. The **curriculum area** under consideration
2. The **pupil population** involved
3. Any **circumstances** related to the curriculum area and/or the pupil population which suggest the need for a new program.

Each of these three elements is discussed in more detail below.

Curriculum Area

The curriculum area will usually be a particular subject area such as English or mathematics. The particular area of interest, however, may be one which combines several traditional disciplines. Basic skills, for example, include the fundamental elements of both mathematics and English; social studies usually refers to a curriculum area composed of several of the social sciences and sometimes a few of the humanities. The material covered by a particular program may also be independent of the traditional disciplines. For example, a particular program might deal with personal or social development, although such goals are usually related to traditional subject areas.

Pupil Population

Two kinds of information are needed here. First, you should indicate the number of pupils (together with their age or grade) who would be affected by the contemplated curriculum change. Then you should determine whether or not those pupils share any characteristics that are important enough to influence the curriculum. Such adjectives as "urban," "underachieving," "bilingual," "educationally disadvantaged," "gifted," etc., should be used to characterize the pupils, where appropriate.

Circumstances that Suggest the Need for a New Program

The information provided here should enable you to answer the following question: "What elements in the current situation have motivated district personnel to look for a new curriculum program?" While your answer should be as complete as possible, no attempt should be made to make any unwarranted assumptions about possible causes.

The worksheet on the following page shows how a current situation can be described so that all of the necessary information is included.

EXAMPLE A

WORKSHEET FOR DESCRIBING CURRENT SITUATION

1. Curriculum Area:

   Reading

2. Pupil Population:

   Number of Pupils:
   250 pupils

   Age/Grade:
   Grades 4, 5, and 6

   Characteristics:
   Many of these pupils are from lower income families in communities which are bilingual. Their general performance in other subjects tends to be below average for their grade level.

3. Circumstances that Suggest the Need for a New Program:

   The scores of these pupils for reading on the California Basic Skills Test indicate an average gain of only 5 months in reading ability over the last year.

   Teachers have reported that the pupils are not interested in the reading selections assigned.

   Data collected in a pupil self-assessment survey showed that very few of these students do much independent reading.

   Pending legislation may provide funds which can be used to equalize educational opportunities for children from cultural minorities.

Use Worksheet A on the following page to describe your current situation.

WORKSHEET A

DESCRIPTION OF CURRENT SITUATION

Use this worksheet to describe the current situation in your district.

1. Curriculum Area: _____

   _____

2. Pupil Population:

   Number of Pupils:

   Age/Grade:

   Characteristics:

3. Circumstances that Suggest the Need for a New Program:

ANALYSIS OF CURRENT SITUATION

How do you want a new program to affect the current situation in the curriculum area involved? Consider each of the factors discussed below before attempting to provide a complete answer to this question.

Analysis of Curriculum Area

Perhaps the curriculum area specified on Worksheet A should be broadened to make it more relevant and/or more interesting. A social studies course limited to topics associated with history and political science might be enhanced by the addition of some topics related to sociology and anthropology. Other situations might be improved if the curriculum area were narrowed, especially in those cases where the teachers do not have enough time to cover all of the material involved.

Still other cases might require merely a shift in emphasis in the curriculum. A course emphasizing the concepts of mathematics could be altered to emphasize the application of mathematical concepts in everyday life. Or, a social studies course based mainly on factual material might be refocused to stress topics of interest to pupils from cultural minorities.

Analysis of Pupil Population

Are all of the pupils affected by the current situation going to be involved in the new curriculum program? Will any other pupils be involved? It might be a good idea to try out or pilot test the new program to see how effective it is before implementing it throughout the district for this pupil population.

Consider also the pupil characteristics that were noted in your description of the current situation. Decide whether or not any of these characteristics are important enough to require a program specifically designed for pupils of this type. You may need a program designed for educationally disadvantaged, rural pupils or for bilingual pupils.

Analysis of Circumstances

How could a new curriculum program help you to change a negative situation into a positive one? In terms of the situation described on page 1-3, a new program might be expected to:

1. Improve reading scores as measured by . . .
2. Provide interesting reading material
3. Provide more time for teachers to help pupils who find reading difficult
4. Encourage independent reading
5. Conform to legislative guidelines for funding

Now combine your analysis of these three elements into a program goal statement which specifies what you are looking for in a new curriculum program.

Example B on the following page shows a completed program goal statement.

EXAMPLE B

INFORMATION SHEET FOR PROGRAM GOAL STATEMENT

Curriculum Area: The new curriculum program should teach:

Reading with the emphasis on comprehension

Pupil Population: The new program should be appropriate for:

Number of Pupils: **250 pupils**
Age/Grade: **Grades 4, 5, and 6**
Characteristics: **Bilingual pupils**

Program Goals: The new program should:

1. **Improve average gains in reading scores as measured by the California Basic Skills Test**
2. **Include reading material that would interest bilingual students**
3. **Allow non-teacher-directed learning**
4. **Encourage independent reading**
5. **Conform to legislative guidelines for funding**

Use Information Sheet 1 on the following page to present your program goal statement.

INFORMATION SHEET 1

PROGRAM GOAL STATEMENT

Complete this information sheet to specify the kind of curriculum program you want to find.

Curriculum Area: The new curriculum should teach:

_____

_____

Pupil Population: The new program should be appropriate for:

Number of Pupils:

Age/Grade:

Characteristics:

Program Goals: The new program should:

_____

_____

_____

_____

_____

_____

DEFINING SCREENING CRITERIA

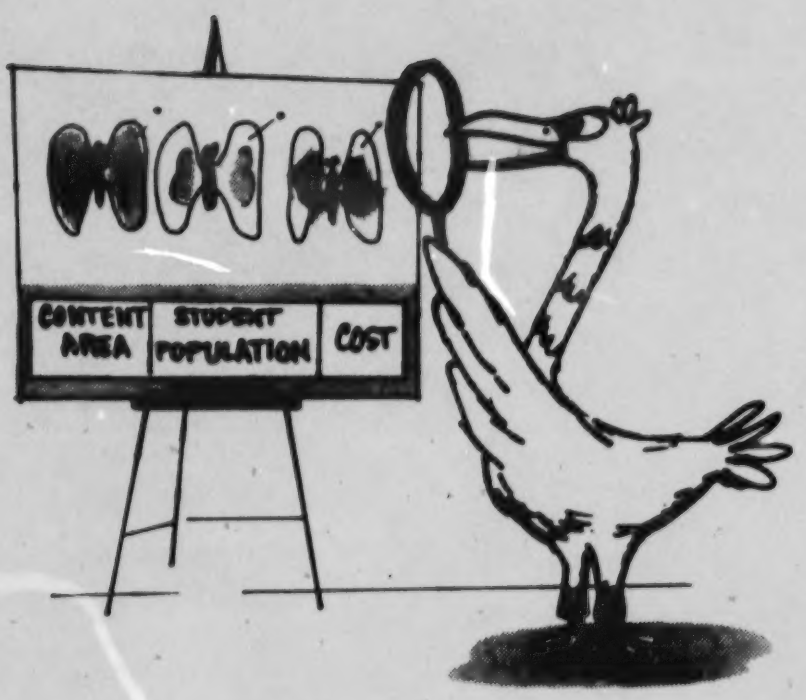
The number of available curriculum programs is continually increasing in nearly **all** subject areas. Conducting a cost-effectiveness analysis of all of the curriculum programs available in any general subject area would be an unmanageable, time-consuming task. If such an analysis is to be useful, therefore, it is necessary to define from three to five screening criteria which can be used to identify a limited number of programs which are likely to be effective in meeting the program goals you have established. These screening criteria can be derived from your program goal statement. They should represent the program features that are most important if the new program is to fulfill your needs within the budget you have available. For the program goal statement presented on page 1-6, such criteria might be:

1. Program should teach reading with the emphasis on comprehension
2. Program should be appropriate for 4th, 5th and 6th grade pupils
3. Program should be designed for bilingual pupils
4. Program should cost no more than _____

If you are ready to define your screening criteria, turn to page 1-12 and complete Information Sheet 2. Otherwise, continue reading.

NECESSARY CRITERIA

These criteria are directly related to factors that must be taken into account before a specific program can be considered suitable. A suitable curriculum program is one which is appropriate in terms of the subject area and the pupils involved and which your school can afford.



Curriculum Area

This is the curriculum area described in your program goal statement. If this curriculum is a traditional subject area, however, it is probable that there will be so many new programs that it would be impossible to examine all of them. It is important, therefore, to be as specific as possible in establishing this screening criterion. For instance, do not use a term like "mathematics" if you can describe the curriculum area more specifically, i.e., algebra or arithmetic skills.

Pupil Population

This is the pupil population specified in your program goal statement. Ignore any pupil characteristics that will not affect your selection of a new program. If any characteristics were noted that you consider important in terms of program selection, establish a separate criterion to cover them; in a case like this, you will have two criteria related to the pupil population.

Cost

In most cases, a district will have a definite amount of money budgeted for the curriculum program under consideration. This figure provides the cost criterion for any new program you may select.

For your screening criterion, you may estimate program costs in terms of the total cost of a new program or in terms of the differences in cost between the current program and the new program being considered, since some of the basic expenses, e.g., teachers' salaries, will be the same for all of the programs in a given curriculum area.

You may estimate program costs on the basis of first year or average year costs. You may also want to estimate per-pupil costs, since information on curriculum programs often specifies per-pupil costs rather than total costs.

Additional Criteria

Other criteria related to the unique situation or local preferences within your district may also be included among your screening criteria. Generally, it is a good idea to limit the number of screening criteria being used. If you feel that the screening criteria established will result in the selection of more programs than it would be practical to analyze, however, include additional screening criteria in your list.

Examples of some kinds of additional criteria which could be added to your list are provided below.

1. Program should be self-instructional
2. Program should be usable in non-graded open classrooms
3. Program should provide for late-entering pupils

All screening criteria except the cost criterion should be checked by a staff member with experience in the curriculum area involved to make sure that they are valid.

Example C on the following page presents a set of screening criteria.

EXAMPLE C

INFORMATION SHEET FOR LISTING SCREENING CRITERIA

Curriculum Area: The new curriculum program should:

1. **Cover most of the social sciences**
2. **Provide in-depth treatment of social science concepts and applications**

Pupil Population: The new program should be appropriate for:

3. **Grades K-6**
4. **Urban pupils; it should reflect the realities of urban life.**

Cost: The new program should cost **no more than:**

5. a. Total: **$20,000** for the first year or _____ for an average year
   b. Per-pupil: **$ 80** for the first year or _____ for an average year

Additional Criteria

6. **Program must provide training, reference, and evaluation materials for staff**

Use Information Sheet 2 on the following page to list your screening criteria.

INFORMATION SHEET 2

LIST OF SCREENING CRITERIA

Use this information sheet to list your screening criteria.

Curriculum Area: The new curriculum program should:

Pupil Population: The new program should be appropriate for:

Cost: The new program should cost no more than:

a. Total: _____ for the first year or _____ for an average year

b. Per-pupil: _____ for the first year or _____ for an average year

Additional Criteria:

IDENTIFYING SUITABLE PROGRAMS

Your screening criteria should enable you to determine which of the many programs available are worthy of further consideration. These programs should be viewed as alternative ways of achieving your program goals. This handbook has been designed to assist you in analyzing three to seven suitable programs in order to determine, on the basis of cost and effectiveness, which would be most appropriate for your school.

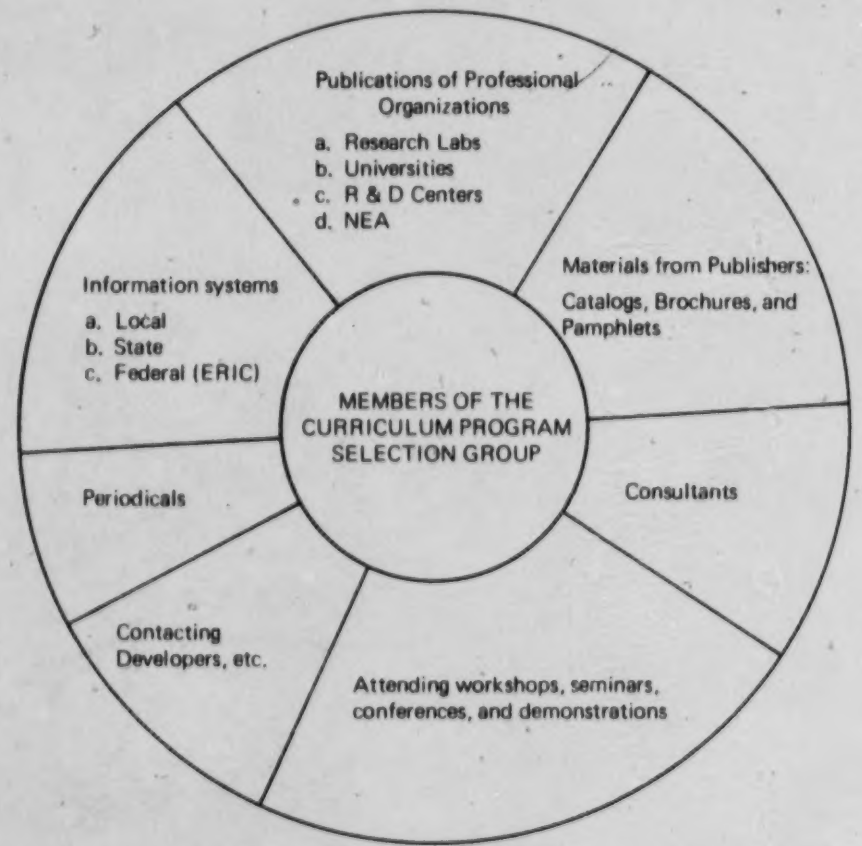
It is suggested that you include your current program in this analysis if it meets your screening criteria. The current program can provide a convenient comparison point. The cost and effectiveness ratings assigned to the current program will give meaning and perspective to the ratings of the alternative programs. The differences between the ratings of the current program and the alternative programs will also help you to decide whether the rating of a given alternative program reflects enough of an improvement to warrant its selection.

If you have already decided which programs will be included in your cost-effectiveness analysis, turn to page 1-17 and list them on Information Sheet 3. Otherwise, continue reading.

SOURCES FOR IDENTIFYING CURRICULUM PROGRAMS

Innumerable curriculum programs are currently available. These programs include bilingual programs for English- and non-English-speaking pupils as well as multicultural, multimedia, and individualized programs in nearly all subject areas. At present, however, there is no single "best" way to locate curriculum programs – since no single reference work or nationwide retrieval system exists. Information on curriculum programs is scattered through many sources. A diagram illustrating the major sources for information on curriculum programs is presented below.

SOURCES OF INFORMATION ON CURRICULUM PROGRAMS



Not all of the sources included in the diagram on the preceding page will be helpful in locating suitable curriculum programs. In order to screen the programs available, you will need to refer to sources that will provide information about many programs quickly, easily, and – especially – objectively. There may be no conferences scheduled for the near future; and visiting another school will only supply you with information about the programs being used in that school. The three most helpful sources for locating information on curriculum programs are:

1. information systems which include local, state, and federal information services.
2. Publications of professional organizations such as research laboratories, universities, R&D centers, NEA, etc.
3. Catalogs, brochures, and pamphlets supplied by publishers.

These sources frequently publish information on the curriculum programs available – classified by specific subject areas or in some other way.* Information on content, grade/age range, special features, and estimated cost is usually supplied for each program listed.**

You may want to consider using other sources of information later – when you begin to gather more detailed cost and effectiveness information on the curriculum programs to be included in your analysis.

Example D on the following page shows how suitable programs should be listed.

*A Sourcebook of Elementary Curricula, Programs and Projects, developed by the Far West Laboratory for Educational Research and Development, San Francisco, California, is a good example of such a publication.

**For further guidelines on gathering information or identifying specific sources of information, refer to Curriculum and Instruction, a product developed by the Administering for Change Program of Research for Better Schools, Inc., 1700 Market Street, Suite 1700, Philadelphia, Pa. 19103.

EXAMPLE D

INFORMATION SHEET FOR LISTING SUITABLE PROGRAMS

The following social studies programs meet all of the screening criteria listed on page 1-11.

1. Name: **Concepts and Inquiry: The Educational Research Council Social Science Program.** Developed by the Educational Research Council of America.

   Publisher: **Allyn and Bacon, Inc., Boston, Massachusetts, 1970.**

2. Name: **Focus on Inner City Social Studies.** Developed at Kent State University, Kent, Ohio.

   Publisher:

3. Name: **Principles and Practices in the Teaching of the Social Studies: Concepts and Values.** Developed by the Center for the Study of Instruction, San Francisco, California.

   Publisher: **Harcourt, Brace and Jovanovich, New York/San Francisco, 1970.**

4. Name: **The Field Social Studies Program.**

   Publisher: **Field Educational Publications, Inc., San Francisco, California, 1970.**

5. Name: **The Intergroup Relations Curriculum.** Developed by The Lincoln Film Center for Citizenship and Public Affairs, Tufts University, Medford, Massachusetts.

   Publisher: **The Lincoln Film Center for Citizenship and Public Affairs, Tufts University, 1969.**

Use Information Sheet 3 on the following page to list the programs that meet your screening criteria.

INFORMATION SHEET 3

LIST OF SUITABLE PROGRAMS

List below the programs that meet your screening critieria. These are the programs on which you need more detailed information. Include information on the source and/or publisher when possible. Identifying suitable programs may require some time. It is suggested that you spend several days identifying programs which might be suitable before completing this information sheet.

1. Name:

   Publisher:

2. Name:

   Publisher:

3. Name:

   Publisher:

4. Name:

   Publisher:

5. Name:

   Publisher:

6. Name:

   Publisher:

7. Name:

   Publisher:

If you have listed more than seven suitable programs, it is suggested that you add at least one criterion to your list of screening criteria. This should enable you to reduce the number of programs being considered to between three and seven. In order to define additional screening criteria, it might be helpful to refer to your program goal statement on page 1-7 and the information on additional criteria on page 1-10.

SUMMARY

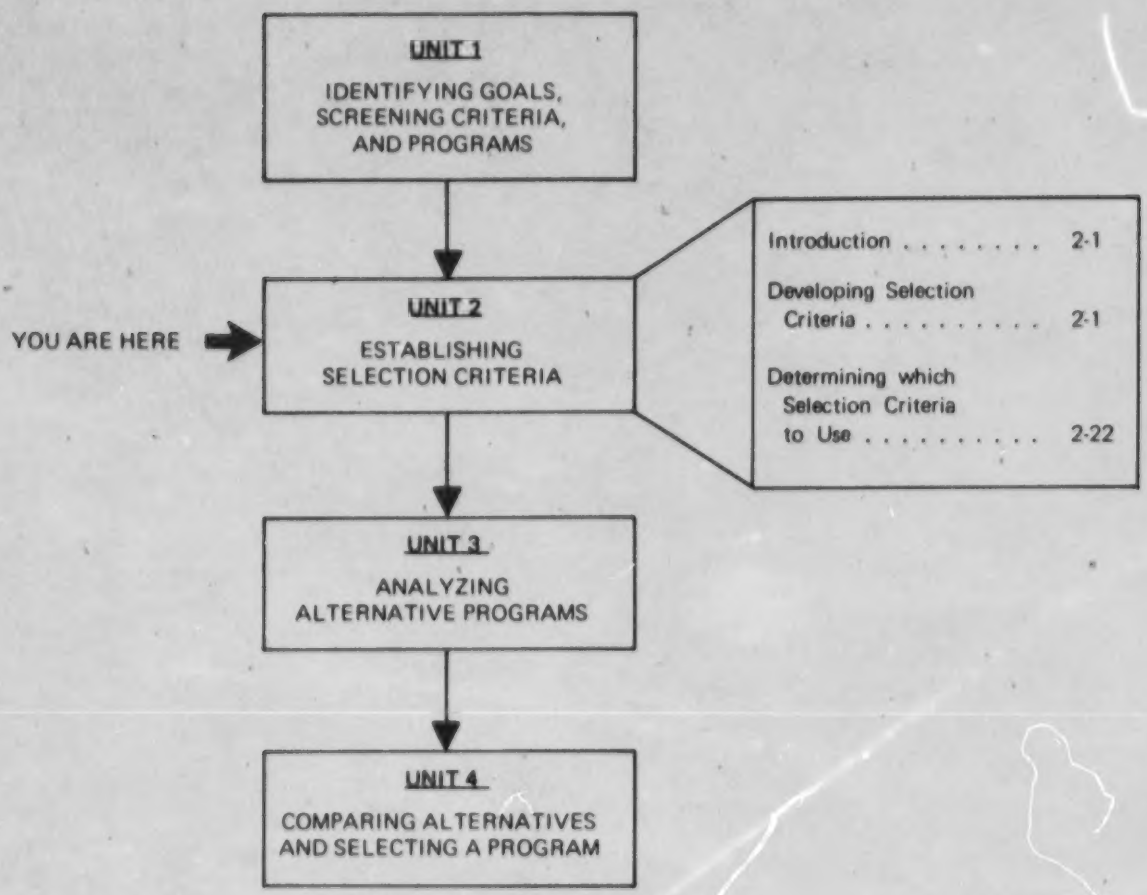
Your **program goal statement** should indicate the curriculum area, the pupil population, and the goals you want to achieve with a new program. Your **screening criteria** should be based upon and compatible with your program goal statement. These screening criteria should enable you to identify from three to seven **suitable programs** each of which has the potential to fulfill your goals for a new curriculum program.

As you work through the activities discussed in the following units of this handbook, one of the suitable programs you have identified here will, eventually, be selected as the "best" curriculum program for use in your school.

Make sure that completed copies of Information Sheets 1, 2, and 3 have been submitted to your Project Manager.

UNIT 2

ESTABLISHING SELECTION CRITERIA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IDENTIFYING GOALS, SCREENING CRITERIA, AND PROGRAMS
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COMPARING ALTERNATIVES AND SELECTING A PROGRAM

INTRODUCTION

In working through the material presented in Unit 1, the preliminary activities involved in comparing alternative curriculum programs were performed. These initial tasks were: (1) formulating a program goal statement, (2) defining a few basic screening criteria which could be used to identify a limited number of curriculum programs for analysis, and (3) identifying several suitable programs which meet those criteria for further consideration.

This unit presents an approach you can follow to develop a set of more specific selection criteria which can be used to analyze and compare the curriculum programs you have identified for further consideration. These criteria will provide the basis for your ultimate selection of a curriculum program.

DEVELOPING SELECTION CRITERIA

Selection criteria can be used to assess alternative curriculum programs in an attempt to determine which program is likely to be most effective in accomplishing the program goals established by school district personnel. Thus, the selection criteria you decide to use should be directly related to those aspects of the curricula being analyzed that are most important in terms of your program goals. For example, if personnel in your district want to use a multimedia program, one or more of your selection criteria should detail the various media the curriculum program selected should include.

As you develop your selection criteria, consider the program goals detailed in your program goal statement. Most program goals can be related to one of the following general categories:

A. **Coverage/Content:** what topics are covered and the extent to which they are covered by a given program.

B. **Instructional Approach:** the educational theories which provide the basis for a given program and the teaching/learning activities included in that program.

C. **Utility:** factors associated with the initiation and continued use of a given program.

D. **Evaluation/Validity:** formal or informal evaluation reports or findings related to the effectiveness of a given program.

E. **Special Considerations:** any other program characteristics that district personnel may consider important.

A comprehensive list of curriculum selection criteria related to each of the foregoing categories is provided on the following pages. A set of specific questions has been provided for each criterion listed. By answering questions of this kind, you will be able to decide whether or not a given program meets each of your selection criteria. When you have completed the tasks discussed in this unit, you should have a list of criteria based upon your program goals and a set of questions to be answered for each criterion listed.

LIST OF POSSIBLE SELECTION CRITERIA

General Category	Criterion	Specific Questions to be Answered
A. Coverage/Content	1. Clear Objectives	Is this curriculum program based upon clearly stated instructional objectives? How appropriate are these objectives? Are the objectives stated on at least two levels ranging from broad goals to specific behavioral objectives? Are the objectives related to specific units or lessons?
	2. Appropriate Scope	Does the curriculum program cover all of the areas you are interested in? If not, can any gaps be filled easily if it is selected?
	3. Logical Sequence	Are the concepts or topics presented in a logical order? Will the pupils be able to follow the sequence of instructional activities with minimal difficulty?
	4. Accuracy/Detail	Is the information presented in the program accurate? Is the content accurate in terms of the level of detail presented? Is the content in agreement with recent findings in this subject area?
	5. Appropriate Grade/ Difficulty Level	Is the content presented at an appropriate level of difficulty for the grade/ability level of the pupils who will be using the program? Is the reading level appropriate for the pupils?

General Category	Criterion	Specific Questions to be Answered
B. Instructional Approach	6. Sound Theoretical/ Empirical Foundations	Is the overall instructional approach based upon an established theory of learning? Are the instructional methods based upon the results of research on the teaching/learning process? Does this methodology support a curriculum philosophy or learning theory accepted or preferred in the district?
	7. Varied Learning Activities	Does the program provide a variety of learning activities for the pupils? Are alternative teaching strategies suggested for assisting the pupils in the learning of concepts and the achievement of instructional objectives? Are multimedia techniques employed?
	8. Pupil Information on Performance	Are pupils regularly provided with information on how well they are doing? Are the diagnosis and careful monitoring of pupil progress elements of this program? Is pupil self-evaluation used?
	9. Provision for Review	Is a spiral presentation of content or concepts employed? Are ample opportunities provided for review and remediation? Are new concepts related to those presented previously? Are familiar concepts presented at higher levels and in different contexts?

General Category	Criterion	Specific Questions to be Answered
B.. Instructional Approach (cont.)	10. Extent of Individualization	Is it possible for pupils to begin at different points in the program? Can pupils progress at their own pace through different instructional sequences? Is any provision made for matching the instructional mode and sequence to individual pupils?
	11. Appropriate Cognitive Level	Does the program provide pupils with opportunities to analyze, synthesize, and evaluate concepts, ideas, or generalizations related to different topics? Do pupils have opportunities to apply what they have learned?

General Category	Criterion	Specific Questions to be Answered
C. Utility	12. Provision for Staff Training	Can members of the staff (teachers, counselors, aides, etc.) use the program with little or no additional training? Are explicit, comprehensive instructions provided for the teaching staff? Is the program relatively easy for the staff to use? What planning, training, and support are needed if this program is to be implemented effectively?
	13. Ease of Student Use	Can the pupils become easily oriented to the procedures of the program? Are explicit, comprehensive directions provided to guide the pupils? Is the program relatively easy for pupils to use? Is the program designed to foster pupil self-motivation and self-management of the learning process?
	14. Attractive Appearance/ Format	Will the pupils find the instructional materials attractive or visually interesting? Is the format used to present program materials logical and clear? Are the illustrations or graphics well done in an appropriate size? Is the size and style of the type used to print the materials appropriate for the pupils?
	15. Equipment Required	Can the program be implemented without any additional equipment? Can the program be implemented if the equipment already available is modified slightly? (Costs related to equipment are considered under Criterion 18 – Reasonable Cost.)
	16. Facilities Required	Can the program be implemented with little or no modification of existing facilities? Can the program be used for various organizational arrangements: self-contained classrooms or clusters, open or traditional classrooms, etc.? (Again, cost should not be considered here, but as part of Criterion 18 – Reasonable Cost.)

General Category	Criterion	Specific Questions to be Answered
C. Utility (cont.)	17. Organizational/Staff Changes Required	Can the program be implemented and operated with little or no change in the organization of the school staff? Can the program be implemented without hiring and/or training any additional personnel? Can the program be implemented without reassigning any current staff members? (Again, cost should not be considered here.)
	18. Reasonable Cost	Can the program be implemented at a relatively reasonable cost? Once in operation, can the program be operated from year to year at a relatively reasonable cost? Can implementation costs be spread over several years? What costs would be incurred for the purchase of materials and equipment? What costs would be necessitated by equipment or facilities and/or staff changes required?

General Category	Criterion	Specific Questions to be Answered
D. Evaluation/ Validity	**19. Expert Authorship**	Are the developers/authors well known in their field? Are they respected by their professional colleagues?
	20. Availability of Formal Evaluation Findings	Have any evaluation studies of the program been published? If so, were the findings positive, neutral, or negative? Was the program evaluated with positive results in a setting similar to your own? Were the evaluation studies comprehensive and technically sound?
	21. Availability of Informal Evaluation Data	Have other school districts used this program successfully? Do experts within your school district or from a nearby university consider this a high quality program? Have many school districts across the state or the nation adopted this program?

General Category	Criterion	Specific Questions to be Answered
E. Special Considerations	**22. Lack of Bias**	Is the program acceptable for use by pupils from all racial, religious, or regional/national origin groups? Are materials free of any sexual, class, cultural, or racial bias? Are females and members of minority groups mentioned in the materials with reasonable frequency and in varied roles which avoid stereotyped characterizations?
	23. Interdisciplinary Approach	Does the program integrate subject matter from various disciplines or areas of study? Do the materials reflect a multidisciplinary approach to problem solving and learning? Is the program designed to encourage affective development and foster specific interpersonal behavioral skills, e.g., group problem solving?
	24. Local Acceptance	Is the program appropriate in terms of any concerns expressed by parents and/or pupils? Are the teachers likely to accept the program, or might they object to using it? Could the program have a positive effect upon future school funding efforts? How might the program be perceived by community leaders and influential groups?

INITIAL RATING OF SELECTION CRITERIA

Some of the curriculum selection criteria listed on the foregoing pages may seem quite important to some members of your group, while others may consider them relatively unimportant. The worksheet on the following page is provided to enable the members of your program selection group to specify, **independently**, the relative importance they would assign to each of the criteria listed. If you have other important criteria that are not listed, they can be filled in at the bottom of the worksheet. After everyone has completed the worksheet, one person should summarize the group ratings by following the procedures described on page 2-12. The summary prepared should be used to stimulate a group discussion of the relative importance of the various criteria **before** a final rating of their relative importance is made.

WORKSHEET A

INITIAL RATING OF SELECTION CRITERIA

Working as an individual, use this worksheet to indicate the relative importance of each criterion listed by circling the appropriate number. Under Additional Criteria, ***fill in any additional criteria you wish to include.***

Key: 9 – Very Important
7 – Rather Important
5 – Marginally Important
3 – Rather Unimportant
1 – Unimportant

	Criterion	Relative Importance								
A.	**Coverage/Content**									
	1. Clear Objectives	1	2	3	4	5	6	7	8	9
	2. Appropriate Scope	1	2	3	4	5	6	7	8	9
	3. Logical Sequence	1	2	3	4	5	6	7	8	9
	4. Accuracy/Detail	1	2	3	4	5	6	7	8	9
	5. Appropriate Grade/Difficulty Level	1	2	3	4	5	6	7	8	9
B.	**Instructional Approach**									
	6. Sound Theoretical/Empirical Foundations	1	2	3	4	5	6	7	8	9
	7. Varied Learning Activities	1	2	3	4	5	6	7	8	9
	8. Pupil Information on Performance	1	2	3	4	5	6	7	8	9
	9. Provision for Review	1	2	3	4	5	6	7	8	9
	10. Extent of Individualization	1	2	3	4	5	6	7	8	9
	11. Appropriate Cognitive Level	1	2	3	4	5	6	7	8	9
C.	**Utility**									
	12. Provision for Staff Training	1	2	3	4	5	6	7	8	9
	13. Ease of Student Use	1	2	3	4	5	6	7	8	9
	14. Attractive Appearance/Format	1	2	3	4	5	6	7	8	9
	15. Equipment Required	1	2	3	4	5	6	7	8	9
	16. Facilities Required	1	2	3	4	5	6	7	8	9
	17. Organizational/Staff Changes Required	1	2	3	4	5	6	7	8	9
	18. Reasonable Cost	1	2	3	4	5	6	7	8	9

INITIAL RATING OF SELECTION CRITERIA (continued)

Key: 9 – Very Important
7 – Rather Important
5 – Marginally Important
3 – Rather Unimportant
1 – Unimportant

Criterion	Relative Importance
D. Evaluation/Validity	
19. Expert Authorship	1 2 3 4 5 6 7 8 9
20. Availability of Formal Evaluation Findings	1 2 3 4 5 6 7 8 9
21. Availability of Informal Evaluation Data	1 2 3 4 5 6 7 8 9
E. Special Considerations	
22. Lack of Bias	1 2 3 4 5 6 7 8 9
23. Interdisciplinary Approach	1 2 3 4 5 6 7 8 9
24. Local Acceptance	1 2 3 4 5 6 7 8 9
F. Additional Criteria	
_____	1 2 3 4 5 6 7 8 9
_____	1 2 3 4 5 6 7 8 9

Submitted by: _____
(name)

If you are working on this task alone, the relative importance of the criteria listed has been determined. If this is the case, turn to page 2-22 to learn how to specify which selection criteria will be used to analyze and compare alternative programs.

If a group is working on this task, submit your completed copy of Worksheet A to your Project Manager. One person *should continue reading on the following page. When the initial ratings have been summarized, each member of the group should be provided with a completed copy of Worksheet B, which provides a basis for the group discussion activities described on page 2-15.*

Summarizing the Initial Ratings of Criteria

One person should summarize the ratings initially assigned to various criteria by the members of the group working on this task. For the purposes of group discussion, only an average rating is needed for each criterion listed.

The average rating assigned to each criterion can be calculated in the following way: (1) multiply the value of each numerical rating by the number of times that rating was assigned to a given criterion; (2) total the results for each criterion; (3) divide the total by the number of ratings assigned to that criterion. This procedure is illustrated below:

Criterion	Rating									Total	Average Rating
	1	2	3	4	5	6	7	8	9		
1. Clear Objective						//		////		(a) 44	(b) 7.3
Result*						12		32			
2. Appropriate Scope				/	/		//	/	/	(c) 40	(d) 6.7
Result				4	5		14	8	9		

(a) 12 + 32 = 44
(b) 44 ÷ 6 = 7.33**
(c) 4 + 5 + 14 + 8 + 9 = 40
(d) 40 ÷ 6 = 6.66**

*Rating Value x Number of Ratings.
**Note that average ratings entered for these two objectives have been rounded to one decimal place; second place decimal figures 1-4 should be rounded downward, while second place decimal figures 5-9 should be rounded upward.

Use Worksheet B to summarize the initial ratings of relative importance assigned by members of your group to the various criteria. Any additional criteria that have been added can be listed at the bottom of the worksheet. After the average rating has been determined for each criterion listed, copies of Worksheet B should be provided to all members of your group.

WORKSHEET B

SUMMARIZING INITIAL RATINGS

Tally the ratings assigned by group members to each criterion listed. To calculate the average rating for each criterion, multiply the value of each rating by the number of times that rating was assigned to a given criterion, total the results for each criterion, and divide the total by the number of ratings assigned to that criterion.

Criterion	Rating									Total	Average Rating
	1	2	3	4	5	6	7	8	9		
1. Clear Objectives											
Result											
2. Appropriate Scope											
Result											
3. Logical Sequence											
Result											
4. Accuracy/Detail											
Result											
5. Appropriate Grade/Difficulty Level											
Result											
6. Sound Theoretical/Empirical Foundations											
Result											
7. Varied Learning Activities											
Result											
8. Pupil Information on Performance											
Result											
9. Provision for Review											
Result											
10. Extent of Individualization											
Result											
11. Appropriate Cognitive Level											
Result											
12. Provision for Staff Training											
Result											

SUMMARIZING INITIAL RATINGS (continued)

Criterion	Rating									Total	Average Rating
	1	2	3	4	5	6	7	8	9		
13. Ease of Student Use											
Result											
14. Attractive Appearance/Format											
15. Equipment Required											
Result											
16. Facilities Required											
Result											
17. Organizational/Staff Changes Required											
Result											
18. Reasonable Cost											
Result											
19. Expert Authorship											
Result											
20. Availability of Formal Evaluation Findings											
Result											
21. Availability of Informal Evaluation Data											
Result											
22. Lack of Bias											
Result											
23. Interdisciplinary Approach											
Result											
24. Local Acceptance											
Result											
25.											
26.											

Discussing the Summary of Initial Ratings

Make sure that each member of your group receives his copy of Worksheet A together with a completed copy of Worksheet B so that any similarities and/or differences in the ratings of relative importance assigned to the various selection criteria can be discussed before the criteria are rated again and finalized. This discussion allows group members whose rating of a given criterion was higher or lower than the average rating for that criterion to explain why they believe their rating is more appropriate. It is helpful for group members to try to reach some degree of consensus on the relative importance of each criterion. Make sure that differences in the ratings assigned reflect differences of opinion rather than different interpretations of the criterion involved.

Any criteria added to the list should also be discussed by members of the group. It is quite possible that someone may suggest a criterion of considerable importance which was not included in the basic list of possible selection criteria.

FINAL RATING OF SELECTION CRITERIA

After group members have compared and discussed their initial ratings, each individual should assign ratings to all of the criteria a second time. This final rating of the criteria enables group members to apply any insights or information gained from the group discussion.

Use the worksheet on the following page to indicate the relative importance of each criterion listed for your district. Before beginning to rate the criteria, fill in any additional criteria members of the group have suggested and delete any criteria which members of the group have consistently rated as unimportant. Assign ratings of relative importance to all of the criteria listed.

WORKSHEET C

FINAL RATING OF SELECTION CRITERIA

Working as an individual, use this worksheet to indicate the relative importance of each criterion listed by circling the appropriate number. Under Additional Criteria, ***fill in any additional criteria your group has decided to include.***

Key: **9 – Very Important**
7 – Rather Important
5 – Marginally Important
3 – Rather Unimportant
1 – Unimportant

	Criterion	Relative Importance								
A.	**Coverage/Content**									
	1. Clear Objectives	1	2	3	4	5	6	7	8	9
	2. Appropriate Scope	1	2	3	4	5	6	7	8	9
	3. Logical Sequence	1	2	3	4	5	6	7	8	9
	4. Accuracy/Detail	1	2	3	4	5	6	7	8	9
	5. Appropriate Grade/Difficulty Level	1	2	3	4	5	6	7	8	9
B.	**Instructional Approach**									
	6. Sound Theoretical/Empirical Foundations	1	2	3	4	5	6	7	8	9
	7. Varied Learning Activities	1	2	3	4	5	6	7	8	9
	8. Pupil Information on Performance	1	2	3	4	5	6	7	8	9
	9. Provision for Review	1	2	3	4	5	6	7	8	9
	10. Extent of Individualization	1	2	3	4	5	6	7	8	9
	11. Appropriate Cognitive Level	1	2	3	4	5	6	7	8	9
C.	**Utility**									
	12. Provision for Staff Training	1	2	3	4	5	6	7	8	9
	13. Ease of Student Use	1	2	3	4	5	6	7	8	9
	14. Attractive Appearance/Format	1	2	3	4	5	6	7	8	9
	15. Equipment Required	1	2	3	4	5	6	7	8	9
	16. Facilities Required	1	2	3	4	5	6	7	8	9
	17. Organizational/Staff Changes Required	1	2	3	4	5	6	7	8	9
	18. Reasonable Cost	1	2	3	4	5	6	7	8	9

FINAL RATING OF SELECTION CRITERIA (continued)

Key: 9 – Very Important
7 – Rather Important
5 – Marginally Important
3 – Rather Unimportant
1 – Unimportant

Criterion	Relative Importance
D. Evaluation/Validity	
19. Expert Authorship	1 2 3 4 5 6 7 8 9
20. Availability of Formal Evaluation Findings	1 2 3 4 5 6 7 8 9
21. Availability of Informal Evaluation Data	1 2 3 4 5 6 7 8 9
E. Special Considerations	
22. Lack of Bias	1 2 3 4 5 6 7 8 9
23. Interdisciplinary Approach	1 2 3 4 5 6 7 8 9
24. Local Acceptance	1 2 3 4 5 6 7 8 9
F. Additional Criteria	
_____	1 2 3 4 5 6 7 8 9
_____	1 2 3 4 5 6 7 8 9

Submitted by: _____
(name)

Submit your completed copy of Worksheet C to your Project Manager.

One person *should continue reading on the following page. When the final ratings have been summarized, each member of the group should be provided with a completed copy of Worksheet D, which provides a basis for the group decision on which selection criteria to use. This activity is discussed on page 2-22.*

Summarizing the Final Ratings of Criteria

One person, preferably the same person who summarized the initial ratings, should summarize the final ratings assigned to various criteria. The same basic procedure can again be followed to determine the average rating for each criterion. Worksheet D can be used to summarize the final ratings assinged to the criteria listed.

Again, the average rating assigned to each criterion can be calculated in the following way: (1) multiply the value of each numerical rating by the number of times that rating was assigned to a given criterion; (2) total the results for each criterion; (3) divide the total by the number of ratings assigned to that criterion.

WORKSHEET D

SUMMARIZING FINAL RATINGS

Tally the ratings assigned by group members to each criterion listed. To calculate the average rating for each criterion, multiply the value of each rating by the number of times that rating was assigned to a given criterion, total the results for each criterion, and divide the total by the number of ratings assigned to that criterion.

Criterion	Rating									Total	Average Rating
	1	2	3	4	5	6	7	8	9		
1. Clear Objectives											
Result											
2. Appropriate Scope											
Result											
3. Logical Sequence											
Result											
4. Accuracy/Detail											
Result											
5. Appropriate Grade/Difficulty Level											
Result											
6. Sound Theoretical/Empirical Foundations											
Result											
7. Varied Learning Activities											
Result											
8. Pupil Information on Performance											
Result											
9. Provision for Review											
Result											
10. Extent of Individualization											
Result											
11. Appropriate Cognitive Level											
Result											
12. Provision for Staff Training											
Result											

SUMMARIZING FINAL RATINGS (continued)

Criterion	Rating									Total	Average Rating
	1	2	3	4	5	6	7	8	9		
13. Ease of Student Use											
Result											
14. Attractive Appearance/Format											
15. Equipment Required											
Result											
16. Facilities Required											
Result											
17. Organizational/Staff Changes Required											
Result											
18. Reasonable Cost											
Result											
19. Expert Authorship											
Result											
20. Availability of Formal Evaluation Findings											
Result											
21. Availability of Informal Evaluation Data											
Result											
22. Lack of Bias											
Result											
23. Interdisciplinary Approach											
Result											
24. Local Acceptance											
Result											
25.											
26.											

DETERMINING WHICH SELECTION CRITERIA TO USE

The analysis of alternative curriculum programs is most effective when a set of from 5 to 15 selection criteria is used. If only a few criteria are used to analyze and compare alternative programs, many important considerations might be overlooked, which could result in the selection of a program that is not appropriate for your school district. On the other hand, if too many criteria are used, the selection process will be extremely cumbersome – although any benefits which result from the extra time and effort expended in including additional criteria may be minimal.

The List of Possible Selection Criteria on pages 2-2 to 2-8 contains twenty-four criteria. If other criteria have been added, you may have developed a list of nearly thirty potential selection criteria, together with the average rating assigned to each criterion. These average ratings should be used to limit your list of potential selection criteria. First, all criteria with average ratings of 5.0 or less should be deleted, since an average rating of 5.0 is only Marginally Important. (See the rating key on page 2-10.) If your list includes fewer than fifteen criteria, you can use the criteria which remain as your final set of selection criteria for analyzing and comparing alternative curriculum programs. If, however, your list still includes more than fifteen criteria, your group may decide to delete the less important criteria still on the list. You can make further deletions by eliminating criteria with average ratings below 5.5 or 6.0. If you use this method to delete further criteria, be careful to choose a cut-off rating that will not eliminate too many of the remaining criteria. For example, it would not be a good idea to delete seven criteria from a list of 16 or 17 criteria.

Another method you might use to limit the number of final selection criteria (after the criteria with average ratings of 5.0 or less have been deleted) is to list the remaining criteria in order of relative importance using the average ratings assigned. Then glance down the list of ratings and see if you can identify a natural break or gap in the ratings assigned somewhere around the middle of the list. If such a gap exists, all criteria with lower ratings can be deleted from your list of final selection criteria.

Now, your curriculum selection group should proceed as a group to limit the number of criteria and establish a final set of selection criteria to be used in analyzing and comparing alternative curriculum programs. Using the list of criteria and average ratings on Worksheet D, follow the procedures described above to develop a final set of selection criteria. Then, as a group, complete Information Sheet 1 on the following pages.

INFORMATION SHEET 1

LIST OF FINAL SELECTION CRITERIA

Use this information sheet to list the selection criteria that you or your group have decided to use in analyzing and comparing the alternative curriculum programs being considered. Define each criterion by filling in the specific questions that must be answered to evaluate a given curriculum program in terms of that criterion. Although sample questions are provided on pages 2-2 to 2-8, you will probably want to make some of those questions more specific and/or add other questions that reflect your particular situation or requirements.

Criterion/Average Rating	Specific Questions to be Answered
1. _____	_____
	_____
	_____
	_____
2. _____	_____
	_____
	_____
	_____
3. _____	_____
	_____
	_____
	_____
4. _____	_____
	_____
	_____
	_____

LIST OF FINAL SELECTION CRITERIA (continued)

Criterion/Average Rating	Specific Questions to be Answered
5. _____	_____
	_____
	_____
	_____
6. _____	_____
	_____
	_____
	_____
7. _____	_____
	_____
	_____
	_____
8. _____	_____
	_____
	_____
	_____
9. _____	_____
	_____
	_____
	_____

LIST OF FINAL SELECTION CRITERIA (continued)

Criterion/Average Rating	Specific Questions to be Answered
10. _____	_____
	_____
	_____
	_____
11. _____	_____
	_____
	_____
	_____
12. _____	_____
	_____
	_____
	_____
13. _____	_____
	_____
	_____
	_____
14. _____	_____
	_____
	_____
	_____

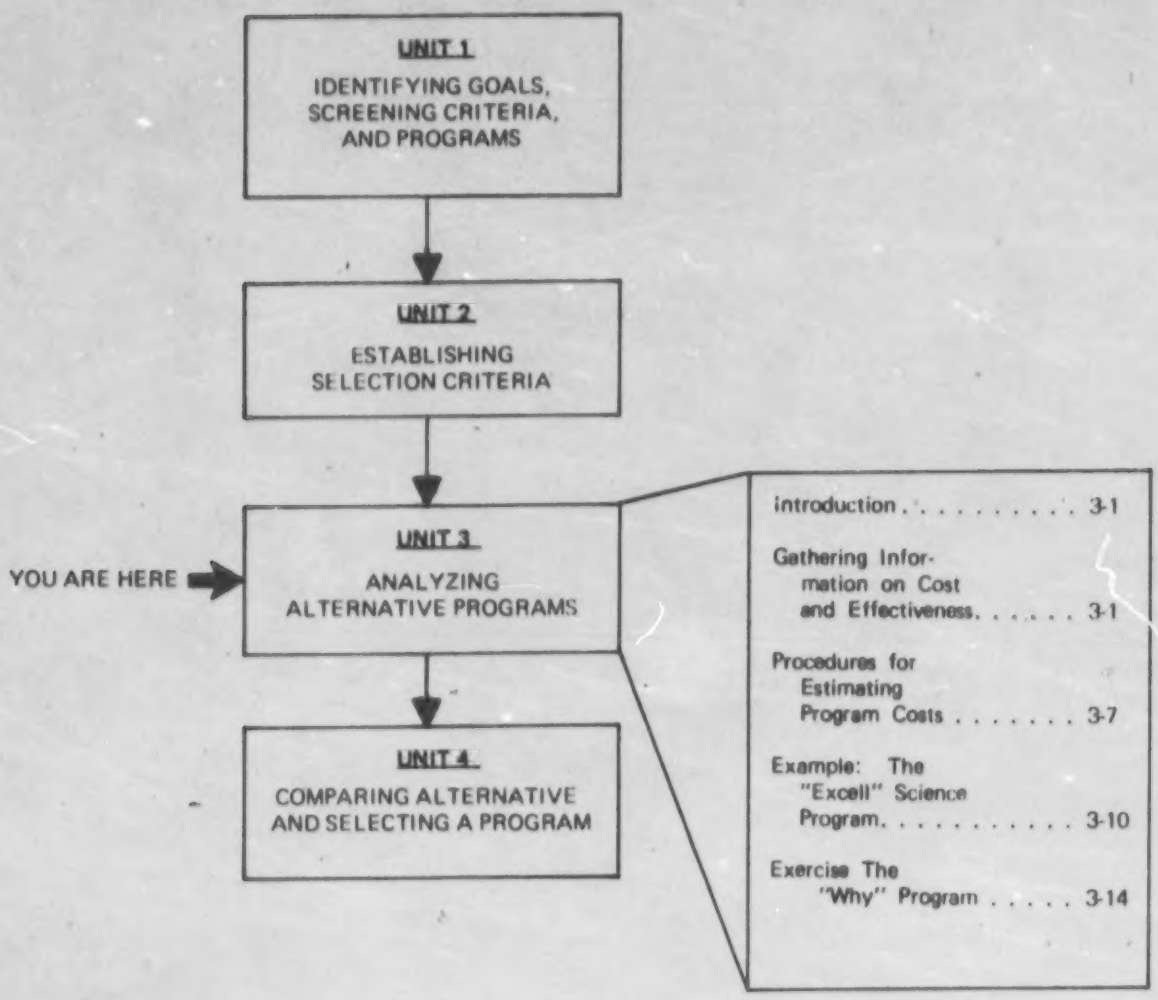
LIST OF FINAL SELECTION CRITERIA (continued)

Criterion/Average Rating	Specific Questions to be Answered
15. _____	_____
	_____
	_____
	_____

Make sure that a completed copy of this information sheet is submitted to your Project Manager.

UNIT 3

ANALYZING ALTERNATIVE PROGRAMS


UNIT 1
IDENTIFYING GOALS, SCREENING CRITERIA, AND PROGRAMS
UNIT 2
ESTABLISHING SELECTION CRITERIA
YOU ARE HERE
UNIT 3
ANALYZING ALTERNATIVE PROGRAMS
UNIT 4
COMPARING ALTERNATIVE AND SELECTING A PROGRAM
introduction 3-1
Gathering Information on Cost and Effectiveness. 3-1
Procedures for Estimating Program Costs 3-7
Example: The "Excell" Science Program. 3-10
Exercise The "Why" Program 3-14

INTRODUCTION

In Unit 2, the criteria to be used for final program selection were established and rated in terms of relative importance. Previously, more general criteria were used to identify programs which warranted further consideration.

In working through this unit, you will conduct a search for information on each of the programs under consideration. In many ways, this is the most difficult and most important activity of all. The procedures and sources discussed in this unit should enable you to collect adequate program information. This task will probably require the longest period of time of any of the activities involved in this project, since it may take days or even weeks for you to gather the necessary information and materials. If more detailed cost information is required than the rough estimate used for screening purposes, you will probably need to work through the procedures for estimating program costs after you complete the information sheets for each program which present information related to each of your selection criteria.

GATHERING INFORMATION ON COST AND EFFECTIVENESS

The three basic steps followed in gathering cost and effectiveness information are: (1) determining what additional information is needed, (2) collecting the needed information from appropriate sources, and (3) summarizing the collected information for use in comparing alternative programs. Each of these three steps is discussed below:

Determining what additional information is needed. To perform this task, you should have the following information at hand for easy reference: the program information you collected for use in screening available programs and your list of selection criteria. Assess the adequacy of the program information you have in relation to your selection criteria to determine what additional information is needed.

Collecting the needed information from appropriate sources. Several sources for information on curriculum programs were mentioned in Unit 1 (pages 1-14, 1-15) to help you develop criteria to be used in identifying suitable programs. Some of those sources may also be helpful as you begin to collect cost and effectiveness information. Below and on the following page, the kinds of information that may be expected from each of those sources are briefly described. If you need help in locating specific sources, however, it might be a good idea to contact your local curriculum and instruction supervisor, county/intermediate unit, or state department of education. Also, you may wish to consult **Curriculum and Instruction: A Guide to Alternatives**, a training package developed by Research for Better Schools, which contains many references on specific sources of curriculum information.

1. **Publishers' catalogs, brochures, and pamphlets** – These materials which are prepared by publishers usually provide general information about curriculum programs but may be rather biased. The information provided usually includes a general description of the program, goals, instructional strategy, major subject emphasis, unit sequencing, learning activities, program development and status, evaluation procedures, contact information, references, and costs.

2. **Developers' technical reports** – These reports include data collected through the evaluation of the program – especially on the instructional outcomes and various aspects of implementation.

3. **Direct contact with developers** – This is an especially useful way to obtain information to answer questions involving any subtleties not easily communicated in a formal way or to gather the most recent data available. (This approach will be more productive if a definite system for making such contacts is established.)

4. **Outside evaluators' reviews** – Such reviews can provide an objective assessment to balance the developer's or publisher's evaluation of a given program.

5. **Local, state, federal information systems** – These information services usually provide useful information on subject area, content, grade/difficulty levels, special features, and estimated costs for currently available curriculum programs.

6. **Consultants** – Contacting curriculum experts from universities, research agencies, or private consulting firms who are familiar with a specific program may provide valuable information concerning the conceptual or theoretical soundness of the instructional approach.

Some information on, for instance, staff training or student use of the program may best be gathered by observing the actual program in use. Further sources of information related to the actual materials or to program implementation are described below.

7. **Direct inspection of samples or the complete program** – This approach allows the members of your group to rely more on their own judgment than on the opinions and impressions of others for information related to such criteria as accuracy/detail, cognitive level, degree of individualization, and lack of bias.

8. **Exhibits, conferences, and workshops** – The potential participant should seriously consider the benefits of attending demonstrations or exhibits in which the actual materials can be seen and questions answered. One advantage is that the most recent information is usually available. The personal involvement in workshops also may make that option especially rewarding; however, these opportunities may not be available when your search is taking place.

9. **Visits to other schools** – Although this approach can involve some logistical problems and considerable cost and time (unless the curriculum under study has been adopted in a neighboring district), such visits provide the best total indication of program effectiveness. Naturally, direct observation is especially useful for gathering information on criteria related to actual classroom dynamics. Even though the potential of a given curriculum program is not always realized in actual implementation, the six criteria related to instructional approach and pupil use can be most effectively evaluated by observation. To the extent possible, the classrooms observed should be similar to those which would be using the new program so that meaningful generalizations can be made.

Summarizing the collected information. Using the procedures and information sources suggested above, you are now ready to gather cost and effectiveness information on the alternative programs under consideration. The time needed for this activity will vary from a few days to a number of weeks – depending on the kinds of criteria involved, the availability and accessability of specific sources, and the expertise and experience of the search staff. Although this activity is not discussed in detail, the importance of this activity for the overall selection process cannot be overemphasized. Since the program information collected will provide the sole basis for your final program selection, your search should be conducted very carefully.

You will need to summarize all of the information collected for each criterion to facilitate later selection activities. It is suggested that all members of your group discuss the information collected and decide what information should be entered on the information summary sheets. (All of the information collected should be retained for possible later reference.)

Example A on the following page shows how appropriate program information can be entered for several selection criteria.

If one of your selection criteria is Reasonable Cost, at least one member of your group ***should be assigned to read the section on estimating program costs which begins on page 3-7 and prepare detailed cost estimates for each curriculum program being considered. This task can be performed while information on effectiveness is being gathered.***

EXAMPLE A

SELECTION CRITERIA INFORMATION BY PROGRAM

Program: *"Excel" Science*

Criterion	Information	Source(s)
A: *Clear Objectives*	This program focuses on scientific processes: observing, classifying, using numbers, measuring, using space/time relationships, communicating, predicting, inferring, defining operationally, formulating hypotheses, interpreting data, controlling variables, experimenting.	Publisher's brochure
B: *Appropriate Scope*	All of the major natural sciences are covered.	Publisher's brochure
C: *Appropriate Grade/ Difficulty Level*	Grades 4, 5, and 6.	Publisher's brochure
D: *Extent of Individualization*	Individualized. Each pupil works at his own pace.	Inspection of the actual materials
E: *Varied Learning Activities*	Pupils are directed through activities designed to develop particular skills. The skills are defined in terms of observable pupil behavior. Although general teaching methods are suggested, the teacher is free to present the lessons in any way that will achieve the specified outcome.	Teacher's manual for the program
F: *Reasonable Cost*	Per-pupil estimate–Initial year: $80 Per-pupil estimate–Each subsequent year: $65	Publisher's brochure Information from users

Use Information Sheet 1 on the following pages to enter information related to your selection criteria.

INFORMATION SHEET 1

SELECTION CRITERIA INFORMATION BY PROGRAM

Use this page and the following pages to summarize information on your selection criteria and to indicate the source of that information for each program included in your analysis. Be sure you have a set of these sheets for each program being considered.

Program: _____

Criterion	Information	Source(s)
A: _____	_____	_____
	_____	_____
	_____	_____
	_____	
B: _____	_____	_____
	_____	_____
	_____	_____
	_____	
C: _____	_____	_____
	_____	_____
	_____	_____
	_____	
D: _____	_____	_____
	_____	_____
	_____	_____
	_____	

SELECTION CRITERIA INFORMATION BY PROGRAM (continued)

Program: _____

Criterion	Information	Source(s)
E: _____	_____	_____
	_____	_____
	_____	_____
	_____	
F: _____	_____	_____
	_____	_____
	_____	_____
	_____	
G: _____	_____	_____
	_____	_____
	_____	_____
	_____	
H: _____	_____	_____
	_____	_____
	_____	_____
	_____	
I: _____	_____	_____
	_____	_____
	_____	_____
	_____	

SELECTION CRITERIA INFORMATION BY PROGRAM (continued)

Program: _____.

Criterion	Information	Source(s)
J: _____	_____	_____
	_____	_____
	_____	_____
	_____	
K: _____	_____	_____
	_____	_____
	_____	_____
	_____	
L: _____	_____	_____
	_____	_____
	_____	_____
	_____	

When completed, all copies of this information sheet should be submitted to your Project Manager.

PROCEDURES FOR ESTIMATING PROGRAM COSTS

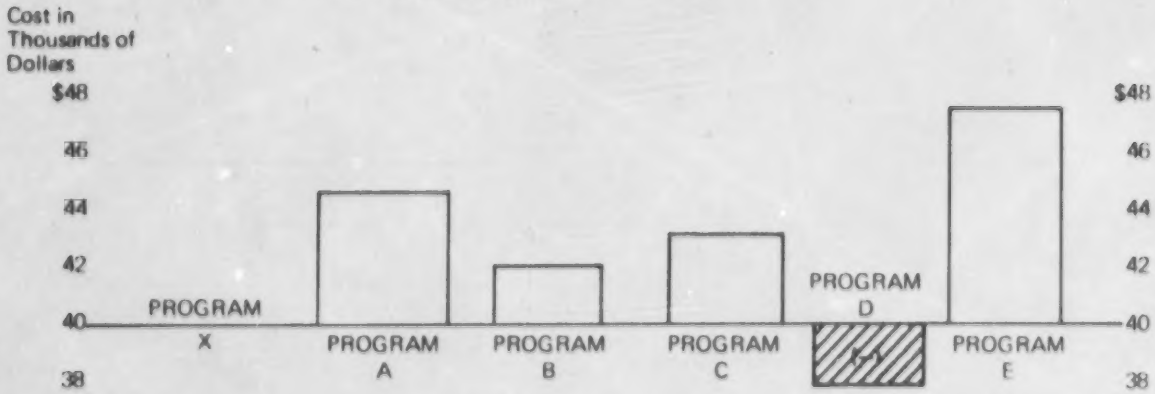
INTRODUCTION

This cost section is especially designed to enable you to estimate detailed costs for each alternative program being considered.

The costs of each alternative program should be estimated in terms of differences from the current program rather than total program costs. This focus on differences serves two functions. First, it clarifies the contrasts among the costs for different programs. Second, it simplifies the costing procedure since many specific costs, e.g., salaries, classroom facilities, etc., remain relatively constant regardless of the specific curriculum program in operation. Indirect costs, such as building depreciation and obsolescence, are not included in these cost estimates.

The figure below illustrates the total cost differences between five alternative curriculum programs and the current program (identified as Program X). The horizontal line at the $40,000 level on the figure corresponds to the cost of the current program. If the total cost for one of the alternative programs (see Program D) is less than the cost of the current program, it should be expressed in negative figures (-).

COST DIFFERENCES FOR SIX PROGRAMS



TERMS USED ON COST ESTIMATE SHEETS

Examine the cost estimate sheet illustrated below.

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE			TOTALS
		PLANNING	TRAINING	INSTRUCTION	
Personnel	Professional				
	Support				
Travel					
Materials	Consumable				
	Permanent/ Replacement				
Equipment	Purchase/ Replacement				
	Maintenance				
Facilities					
Contracted Services					
TOTALS					GRAND TOTAL

To help you complete cost estimate sheets for each of the programs being analyzed, all of the terms used on these sheets have been defined in detail below and on the following page.

1. **Cost Categories***

   A. **Personnel** - applies to people who are regularly employed, whether full-time or part-time.

      1. **Professional** includes any teachers, specialists, and/or administrators in addition to the existing staff.
      2. **Support** includes extra aides, clerks, and any other nonprofessional staff needed to operate a given program.

   B. **Travel** - includes actual costs for transportation plus all related expenses, such as food and lodging.

   C. **Materials** - includes any additional costs for the usual small objects and books, booklets, small tools, and manipulable objects (e.g., Cuisenaire rods) which are required for a given program.

      1. **Consumable** includes pupil booklets, work books, evaluation guides, and manipulables which cannot be reused and have to be purchased every year.
      2. **Permanent/replacement** includes teachers' manuals and general classroom materials that can be reused although replacements may be needed from time to time.

*In categories where the current program cost is higher, the entries on the cost estimate sheet should be preceded by a minus sign (-).

D. **Equipment** – includes any additional costs for the large, generally more permanent objects and tools which are required for a given program.

1. **Purchase costs** applies to the original costs for acquiring equipment, e.g., microscopes, easels, and special audio-visual equipment. Any additional furniture needed should also be included.

2. **Maintenance and replacement** cover any additional costs required to replace non-consumable materials and/or to keep equipment in working condition.

E. **Facilities** – encompasses any necessary changes in the existing physical plant whether minor (painting or rewiring) or extensive (installing carrels or laboratory tables or removing partitions between rooms).

F. **Contracted services** – includes all expenses related to a particular activity excluding salaries shown under **Personnel**. Included here are such costs as consultants' fees and expenses and any costs for outside data analysis, reproduction, or specialized support services.

II. **Program Implementation Phases**

A. **Planning** – includes all activities which precede any special training sessions. Thus, an introductory workshop or a visit to a school using a given curriculum program would be entered here.

B. **Training** – applies to any formal instruction, workshops, etc., provided or required to prepare teachers or aides to implement a given program when extra time, materials, and/or expenses are involved.

C. **Instruction** – refers to actual teaching/learning activities related to a given curriculum program. This category also includes all evaluation activities, but it does not include instruction for teachers or aides, which is entered above under **Training**.

GENERAL COSTING PROCEDURES

Since curriculum programs are usually implemented in a school district for more than one year, it is realistic to estimate program costs for the initial year and for an average subsequent year. During the first year of implementation, special considerations, including costs, are nearly always involved which do not recur in subsequent years of program use. It is necessary, therefore, to fill out separate cost estimate sheets for these two time periods.

Before you actually fill out the cost estimate sheets, check the expenses in the various cost categories for the current program. Remember, all of the estimates will be based upon current program expenses or those projected for the coming year if the existing program is retained. (In most cases your cost estimates will be for additional costs, but in some cases they may be lower than similar costs for the current program.) Therefore, in order to develop your cost estimates, you should answer such questions as: "How many teachers, specialists, and support staff are involved with the current program? What materials, equipment, and facilities do we have? What items will need to be replaced?" Once you have this information, you can develop cost estimates for each program under consideration in terms of additional (or lesser) expenses.

You may want to prepare more detailed cost estimates initially and then combine the detailed estimates for each category on your cost estimate sheets.

Some cautionary notes are listed below to improve the accuracy of your costing efforts.

1. The size of the classes or instructional units in your district may not be the same as the number of pupils per class projected for a given program. For instance, if your classes average 35 pupils and the materials are supplied in sets of 30, you may have to use two sets (60, or half again as many sets as you need) for each class, unless sharing across classrooms is possible.

2. Be sure to include fringe benefits when calculating all salary information.

3. Replacement costs are not considered a separate cost category. Any replacements projected should be included with the costs for non-consumable materials and/or equipment.

4. Remember, all cost estimates should represent differences from the costs of the current program. If the costs for a new program are lower in some cost categories than the same costs for the current program, those estimates (differences) should be preceded by a minus sign (-).

DIRECTIONS FOR ENTERING COST ESTIMATES

1. Round off all estimates to the nearest whole dollar.
2. Enter one figure in each square. Keep the figures properly lined up for later calculations.
3. Cross out all squares without entries, except the squares where "Totals" are entered (right-hand column and bottom row).
4. Fill in the appropriate figures in each of the "Totals" squares and enter a zero (0) in each "Totals" square without an entry.
5. The Grand Total in the bottom right-hand corner should equal the sum of the totals in the columns for the three implementation phases as well as the sum of all entries in the "Totals" column. If it does not, check your figures until the error is found and make whatever corrections are necessary.

EXAMPLE: THE "EXCELL" SCIENCE PROGRAM

SETTING

This example is based upon a hypothetical situation in an imaginary, relatively large school district where school personnel are looking for a commercial science program suitable for their fifth graders. This imaginary district is supposed to contain six middle schools with a total of 15 fifth grade classrooms. Most of these classrooms have from 24 to 30 pupils. The two or three classrooms which contain more than 30 pupils can acquire any extra materials needed from classrooms with fewer than 30 pupils.

In doing their cost-effectiveness analysis, district personnel are using the following information as the basis for their cost estimates:

1. Currently, teacher aides are not being used in fifth grade classrooms.
2. Teachers' salaries, including fringe benefits, average $12,000 per year. The fifth grade teachers all teach science part of the time, however, since science is not departmentalized at this grade level.
3. The district currently employs a mathematics/science coordinator who spends half of her time in each of these subject areas. Her salary, including fringe benefits, is also $12,000 per year.
4. The school year includes 40 weeks or 200 days.
5. The current number of pupils, classrooms, schools, etc., is expected to remain stable over the time period involved.
6. For purposes of simplicity, district personnel have decided that such factors as inflation, increased salaries, etc., will not be taken into account. (When doing your cost analysis, of course, you may wish to consider such factors.) They are estimating program costs for a period of three years.

CATALOG SPECIFICATIONS FOR THE "EXCELL" PROGRAM

"Excell" is a highly structured science program for Grades 4, 5, and 6. The information presented below, from the publisher's catalog, provides specifics for the middle or intermediate level of this program.

A. **Non-consumable (Permanent) Materials**
   1. Instructors' general classroom materials, each set sufficient for three classrooms: $55 per set.
   2. Sets of unit booklets, study guides, and manipulables, one set needed for every group of six pupils: $27 per set.

B. **Consumable Materials**
   1. For every group of six pupils: one set of planning booklets, workbooks, and consumable manipulables: $60 per set.
   2. For every group of six pupils: one set of self-test booklets, evaluation guides, and self-report sheets: $25 per set.

C. **Training Kits**

   Each set of three (one needed for each professional instructor) self-contained kits: $90.

D. **Additional Requirements**

   One teacher's aide during science periods for each classroom using the program.

DISTRICT MODIFICATIONS AND/OR ADDITIONS TO CATALOG SPECIFICS

Experience with similar materials, together with further investigation, produced the following estimates on replacement rates for non-consumable materials and equipment for a three-year cost cycle.* As a safety measure, and to provide a constant figure for the years after the first year, these rates were modified as indicated below.

3-Year Cost Cycle	Estimated Replacement Rate	Modified Replacement Rate
1st year:	5%	7%
2nd year:	10%	10%
3rd year:	12%	10%

The replacement rate for the first year was figured as 7%, while a replacement rate of 10% was estimated for each of the two subsequent years. These estimates were modified by simply decreasing the replacement rate for the third year by 2% and increasing the replacement rate for the first year by 2%.

If this program is selected, four staff members (the mathematics/science coordinator and three teachers) will attend a one-day introductory workshop presented by the developers of the program. Workshop expenses will include travel (300 miles each way by car), food and lodging for one day, and workshop fees of $75 per person. Salaries are not included since the workshop is on a Saturday and the participants have volunteered their time for one day. The fee for the workshop leader is $150.

After the introductory workshop, 12 other fifth grade teachers will be trained to properly implement the program. The coordinator and 15 fifth grade teachers will each receive one day's pay for participating.

To implement the "Excell" Program, district personnel have decided that the coordinator should spend half of her science time working with the "Excell" Program. Also, one teacher aide will be hired for each of the six middle schools; these aides will spend approximately half of their time on fifth grade science. Aides' salaries, including fringe benefits, would equal $6,000 per year.

Although the equipment needed for the "Excell" Program is considered standard in most buildings, some of the equipment is not currently available in two schools. The costs for this equipment were estimated at $70 for one school and $230 for the other.

Finally, the estimated costs for remodeling and other modifications needed in five of the schools total $2,890.

On the next two pages, Initial Year and Subsequent Year cost estimates are presented for the "Excell" Program. Study them very carefully, considering both the format and the specific figures. Remember, these cost estimates should represent differences *from the costs of the current program; in this case, all estimates are for* additional *expenses. Each estimate is related to a specific cost category for a particular phase* – Planning, Training, *or* Instruction. *Note that some entries represent the result of several calculations. The notes below each chart are provided to explain how some of the more complex cost estimates were calculated. If you do not understand how any of these estimates were developed, review the procedures for estimating costs.*

*The average number of years a given curriculum is operated in a particular district defines the district cost cycle. In this district, the cost cycle is three years.

INITIAL YEAR

COST ESTIMATES FOR THE "EXCELL" PROGRAM

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE			TOTALS
		PLANNING	TRAINING	INSTRUCTION	
Personnel	Professional		c. $960	e. $3,000	
	Support			f. 18,000	$21,960
Travel		a. $300			300
Materials	Consumable		d. 450	g. 6,375	
	Permanent/ Replacement			h. 2,461	9,286
Equipment	Purchase/ Replacement			i. 321	
	Maintenance				321
Facilities				j. 2,890	2,890
Contracted Services		b. 150			150
TOTALS		$460	$1,410	$33,047	$34,907

GRAND TOTAL

Comments

a. Travel expenses at $75 per person for four participants in a one-day introductory workshop: $300.

b. Workshop leader's fee for one day: $150.

c. Salaries for 16 teachers (1/200 of $12,000 including fringe benefits) for a one-day training session: 16 x $60 or $960.

d. Five sets of training materials at $90 each: $450.

e. Half the salary (including fringe benefits) for the math/science coordinator's work on science: $3,000.

f. Half the annual salaries (including fringe benefits) for six teacher aides, one for each school: 6 x $3,000 or $18,000.

g. Seventy-five sets (5 in each of 15 classrooms) of consumable instructional and evaluation materials ($60 and $25 per set respectively): 75 x $85 or $6,375.

h. Seventy-five sets of non-consumable pupil instructional and evaluation materials at $27 each plus five sets of instructor materials at $55 per set – plus 7% allowance for initial year replacement costs: $2,300 (75 x $27 + 5 x $55) + $161 (7% of $2,300): $2,461.

i. Cost of equipment purchased: $300 + $21 (7% allowance for initial year replacement costs): $321.

j. Cost of modifying facilities in five schools to accommodate this program: $2,890.

SUBSEQUENT YEAR

COST ESTIMATES FOR THE "EXCELL" PROGRAM

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE		TOTALS
		TRAINING	INSTRUCTION	
Personnel	Professional		k. $ 3,000	
	Support		l. 18,000	$21,000
Travel				0
Materials	Consumable		m. 6,375	
	Permanent/ Replacement		n. 230	6,605
Equipment	Purchase/ Replacement		o. 30	30
	Maintenance			
Facilities				0
Contracted Services				0
TOTALS		$0	$27,635	$27,635

GRAND TOTAL

Comments

k. Half the salary (including fringe benefits) for the math/science coordinator's work on science: $3,000. (Same as entry e. on the preceding worksheet.)

l. Half the annual salaries (including fringe benefits) for six teacher aides, one for each school: 6 x $3,000 or $18,000. (Same as entry f. on the preceding worksheet.)

m. Seventy-five sets (5 in each of 15 classrooms) of consumable instructional and evaluation materials ($60 and $25 per set respectively): 75 x $85 or $6,375. (Same as entry g. on the preceding worksheet.)

n. Replacement costs for non-consumable materials: 10% of $2,300 or $230.

o. Replacement costs for equipment: 10% of $300 or $30.

EXERCISE: THE "WHY" PROGRAM

SUMMARY OF SETTING

Suppose that district personnel in the same imaginary school district where the "Excell" Program was being analyzed are also considering another program, the "Why" Program. The information below describes the setting briefly.

1. The "Why" Program is being considered for use with district fifth graders. The program selected will replace the current fifth grade science program.

2. Six schools (with a total of 15 fifth grade classrooms and teachers) are involved. Calculations can reasonably be based on an average class size of 30 pupils.

3. Currently, teacher aides are not being used in fifth grade classrooms.

4. Teacher salaries, including fringe benfits, average $12,000 per year.

5. The district currently employs one specialist, a math/science coordinator (whose salary is $12,000 per year, including fringe benefits), who spends half of her time in each of these subject areas.

CATALOG SPECIFICATIONS FOR THE "WHY" PROGRAM

"Why" is an individualized science program developed for use in elementary schools. It is designed to encourage inquiry and independent exploration by the pupils. Thirty sets of Exploration Units are provided for the fifth graders. To facilitate your work on this exercise, it is suggested that you calculate the cost estimates for this imaginary school district as you review the cost information provided below.

A. **Non-consumables (Permanent Materials):** Thirty sets of Exploration Units; each set adequate for 15 students. Although the Exploration Units vary in price, the average cost is $20 per unit.

B. **Consumable Materials:** One set for each group of five students: $60 per set.

C. **Recommended:** That all teachers involved attend a one-week training session. Fees for salary and travel expenses for an instructor to lead the session would cost $500.

D. **Recommended:** That a full-time science coordinator be employed to work with the "Why" Program in the fifth grade classrooms.

E. **Additional Information:** Teacher aides are not needed to implement the "Why" Program.

DISTRICT MODIFICATIONS AND/OR ADDITIONS TO CATALOG SPECIFICS

1. A new full-time science coordinator will be hired -- in addition to the current mathematics/science coordinator. This new coordinator will devote full time to the fifth grade "Why" Program.

2. Initial year replacement costs for non-consumable materials are estimated at 10%. After the initial year, these costs are estimated at 15% per year for the duration of the five-year cost cycle.

3. Sixty worktables are needed during the initial year. It is expected that ten tables will be needed in each subsequent year to replace damaged or otherwise unusable furniture. The worktables cost $45 each.

4. It is expected that four new fifth grade teachers will be coming in each year to replace teachers who transfer or retire. Each new teacher will be expected to participate in a one-week training session. Therefore, the services of an instructor will be needed for a one-week session prior to each subsequent year.

On the following page, a worksheet is provided for you to fill in cost estimates on the basis of the information supplied.

After completing the worksheet, check your answers to those provided on the following pages. If you discover any discrepancies between your answers and the solutions provided, be sure to read the notes of explanation on the correct entries.

WORKSHEET

COST ESTIMATES FOR THE "WHY" PROGRAM

PART A: INITIAL YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE			TOTALS
		PLANNING	TRAINING	INSTRUCTION	
Personnel	Professional				
	Support				
Travel					
Materials	Consumable				
	Permanent/ Replacement				
Equipment	Purchase/ Replacement				
	Maintenance				
Facilities					
Contracted Services					
TOTALS					

GRAND TOTAL

PART B: SUBSEQUENT YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE		TOTALS
		TRAINING	INSTRUCTION	
Personnel	Professional			
	Support			
Travel				
Materials	Consumable			
	Permanent/ Replacement			
Equipment	Purchase/ Replacement			
	Maintenance			
Facilities				
Contracted Services				
TOTALS				

GRAND TOTAL

PART A: SOLUTION

COST ESTIMATES FOR THE "WHY" PROGRAM

INITIAL YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE			TOTALS
		PLANNING	TRAINING	INSTRUCTION	
Personnel	Professional		a. $4,500	c. $12,000	
	Support				$16,500
Travel					0
Materials	Consumable			d. 5,400	
	Permanent/ Replacement			e. 19,800	25,200
Equipment	Purchase/ Replacement			f. 2,970	2,970
	Maintenance				
Facilities					0
Contracted Services			b. 500		500
TOTALS		$0	$5,000	$40,170	$45,170

GRAND TOTAL

Comments

a. One week's salary for an average teacher is 1/40 of $12,000 or $300; for 15 teachers this equals $4,500.

b. Fees for salary and travel expenses for the workshop leader equal $500.

c. Salary, including fringe benefits, for a curriculum coordinator working full time with this program equals $12,000.

d. Each set of consumables costs $60 per year per group of five students, this equals $360 per classroom (6 x $60) or $5,400 for all 15 classrooms.

e. Thirty sets of Exploration Units (non-consumable materials) cost an average $20 per unit or $600 for a complete set. Since each classroom needs two complete sets, these costs equal 30 x $600 or $18,000 plus replacement costs: 10% of $18,000 or $1,800.

f. Sixty worktables (at $45 each) cost $2,700 plus replacement costs: 10% of $2,700 or $270.

PART B: SOLUTION

COST ESTIMATES FOR THE "WHY" PROGRAM

SUBSEQUENT YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE: TRAINING	PROGRAM IMPLEMENTATION PHASE: INSTRUCTION	TOTALS
Personnel	Professional	g. $1,200	i. $12,000	$13,200
	Support			
Travel				0
Materials	Consumable		j. 5,400	8,100
	Permanent/ Replacement		k. 2,700	
Equipment	Purchase/ Replacement		l. 450	450
	Maintenance			
Facilities				0
Contracted Services		h. 500		500
TOTALS		$1,700	$20,550	$22,250

GRAND TOTAL

Comments

g. One week's salary for four teachers equals 4 x $300 or $1,200.

h. Fees and travel expenses for the workshop leader equal $500.

i. Salary, including fringe benefits, for curriculum coordinator working full time with this program equals $12,000. **(Same as entry c. in the solution to Part A.)**

j. Each set of consumables costs $60 per year per group of five students, this equals $360 per classroom (6 x $60) or $5,400 for all 15 classrooms. **(Same as entry n. in the solution to Part A.)**

k. Replacement costs for non-consumable materials equal 15% of $18,000 or $2,700.

l. Ten worktables (at $45 each) cost $450. (In this case, replacement costs have not been estimated as a percentage of original purchase costs.)

INFORMATION SHEET 2

COST ESTIMATE SHEET FOR ALTERNATIVE CURRICULUM PROGRAM

Program: _____

Complete a copy of this sheet with detailed cost estimates for each of the alternative programs being considered.

INITIAL YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE			TOTALS
		PLANNING	TRAINING	INSTRUCTION	
Personnel	Professional				
	Support				
Travel					
Materials	Consumable				
	Permanent/ Replacement				
Equipment	Purchase/ Replacement				
	Maintenance				
Facilities					
Contracted Services					
TOTALS					

GRAND TOTAL

SUBSEQUENT YEAR

COST CATEGORY		PROGRAM IMPLEMENTATION PHASE		TOTALS
		TRAINING	INSTRUCTION	
Personnel	Professional			
	Support			
Travel				
Materials	Consumable			
	Permanent/ Replacement			
Equipment	Purchase/ Replacement			
	Maintenance			
Facilities				
Contracted Services				
TOTALS				

GRAND TOTAL

INFORMATION SHEET 3

SUMMARY COST ESTIMATE SHEET

From each copy of Information Sheet 2, enter the name of the program together with the total cost estimates for both the initial year and each subsequent year. Then calculate the following figures: total cost, average cost per year, and cost per pupil.

The average number of years a given curriculum program is operated in this district is _____.
(Use this figure as your cost cycle.)

Program	Initial Year	Each Sub. Yr.	*Total Cost	**Cost Per Year	+Cost Per Pupil

*Total Cost equals total costs for the initial year plus the total costs for all of the remaining years of your cost cycle. (If your district's cost cycle is five years, for instance, the total cost will be the costs for the initial year plus four times the costs for each subsequent year.)

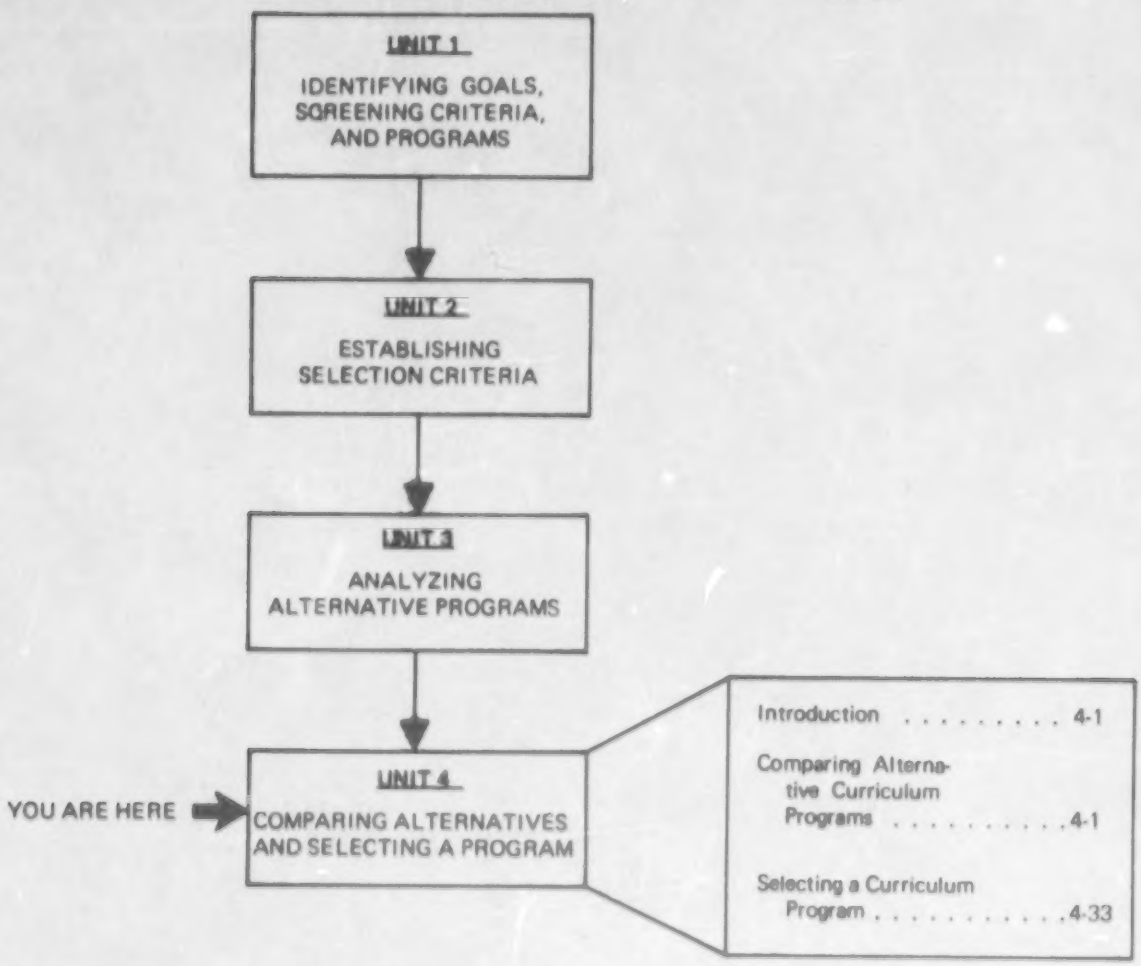
**Cost per Year equals total cost divided by the number of years in your cost cycle.

+Cost Per Pupil equals the cost per year divided by the total number of pupils in this program.

When completed, this information sheet together with all copies of Information Sheet 2 should be submitted to your Project Manager to accompany the copies of Information Sheet 1 which he has received.

UNIT 4
COMPARING ALTERNATIVES AND SELECTING A PROGRAM

SEQUENCE OF UNITS


UNIT 1
IDENTIFYING GOALS, SCREENING CRITERIA, AND PROGRAMS
UNIT 2
ESTABLISHING SELECTION CRITERIA
UNIT 3
ANALYZING ALTERNATIVE PROGRAMS
UNIT 4
COMPARING ALTERNATIVES AND SELECTING A PROGRAM
YOU ARE HERE
Introduction 4-1
Comparing Alternative Curriculum Programs 4-1
Selecting a Curriculum Program 4-33

INTRODUCTION

In working through this unit, members of your group will actually compare the alternative curriculum programs being considered. Then, after a curriculum program has been selected, you will document your selection effort.

COMPARING ALTERNATIVE CURRICULUM PROGRAMS

Two basic steps are involved in the meaningful comparison of curriculum programs. The first step is to rank the programs being considered. This is done by first having each group member compare the programs by pairs to determine the extent to which each program satisfies each selection criterion.

The second step is to rate the programs involved. The paired rankings developed in the first step are subsequently used by members of the selection group to rate the programs being compared. This step involves assigning relative numerical ratings to each criterion for each program. These ratings are then summarized across all of the selection criteria to produce a total rating or score for each program. The total ratings will indicate how well each of the programs satisfies all of the selection criteria established. In this sense, the total rating assigned to each program is not absolute – it represents the relative rating for each program included in your comparison.

RANKING PROGRAM

In order to rank the alternative programs being considered, you will need: (1) a copy of the final selection criteria established in Unit 2 (Information Sheet 1) and (2) copies of all completed selection criteria information sheets from Unit 3 (Information Sheet 1).

You can use the technique of paired comparisons presented here to rank the programs being considered. Example A on the following page shows how your paired rankings should be recorded. This technique is discussed in detail below.

1. A Program Ranking Form for Five Programs was used for Example A. In the key, five code letters (A through E) were assigned to the five programs under consideration.

2. One copy of this form is needed for each of your selection criteria. The criterion used in Example A is Appropriate Scope.

3. Refer to the key and fill in the parentheses following each code letter with the name or abbreviation of the appropriate program.

4. Review the information you have on each program for each selection criterion, and compare that information for each pair of programs. For each pair, check the program which you believe would better satisfy the criterion involved.

EXAMPLE A

PROGRAM RANKING FORM – FIVE PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies this selection criterion.

Criterion: Appropriate Scope

1.	A	(METRIC)	X	6.	C	(CHIMP)	
	B	(NU-MATH)			A	(METRIC)	X
2.	C	(CHIMP)	X	7.	D	(SIGMA)	
	D	(SIGMA)			B	(NU-MATH)	X
3.	E	(FLAME)		8.	E	(FLAME)	
	A	(METRIC)	X		C	(CHIMP)	X
4.	B	(NU-MATH)		9.	A	(METRIC)	
	C	(CHIMP)	X		D	(SIGMA)	X
5.	D	(SIGMA)	X	10.	B	(NU-MATH)	
	E	(FLAME)			E	(FLAME)	X

KEY

A – METRIC
B – NU-MATH
C – CHIMP
D – SIGMA
E – FLAME

Here is another example to illustrate how the paired rankings should be used. Suppose that a program selection group who are trying to select a new mathematics program for grades K-6 have established Appropriate Scope as one of their selection criteria. Then, suppose that the following information had been gathered on Program X:

> **Appropriate Scope (Information from publisher's catalog and personal review of materials)**
>
> This program covers: (1) numeration, (2) addition, (3) subtraction, (4) multiplication, (5) division, (6) fractions, (7) money, (8) time, and (9) systems of measurement. It includes many examples and exercises which relate the content to everyday situations.

Each member of the group uses the foregoing information to answer the questions relating to Appropriate Scope that the group specified as important (see Information Sheet 1 from Unit 2). One of these questions was: "Does this program cover geometry and graphing?" For Program X, the answer would be "No." If coverage of geometry and graphing were not too important, the answers to the questions related to Appropriate Scope might indicate that Program X satisfies the criterion relatively well. If geometry and graphing were critical, however, the answers to the questions related to this criterion might indicate that Program X does not satisfy this criterion very well. Your answers to the questions related to each criterion will enable you to decide which of the programs in each pairing would better satisfy your requirements.

If Reasonable Cost is one of your final selection criteria, you will want to review the cost data collected on the alternative programs being compared. Refer to Information Sheet 3 from Unit 3 for this information. When you review the cost data, remember that these costs were calculated as differences from the costs of the current program. Although initial year costs for a given program may be high, the cost of operating that program in subsequent years may be low. Therefore, cost per year would probably provide the best basis for comparing the costs of different programs; members of the group performing this task should decide whether or not they also want to compare initial year costs.

Now, from the worksheets provided on the following pages, your Project Manager will select the appropriate copy of Worksheet A for the number ***of programs you are going to compare. The key at the bottom of the worksheet indicates the code letter assigned to each of the programs being compared. You will receive a copy of Worksheet A from your Project Manager for each of the selection criteria, so that you can rank the programs being considered on the basis of each criterion.***

WORKSHEET A

PROGRAM RANKING FORM – THREE PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies the selection criterion for this copy of Worksheet A.

Criterion: _____

1. A (_____) ___
   B (_____) ___

2. C (_____) ___
   A (_____) ___

3. B (_____) ___
   C (_____) ___

KEY

A –
B –
C –

WORKSHEET A

PROGRAM RANKING FORM – FOUR PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies the selection criterion for this copy of Worksheet A.

Criterion: _____

1.	A	(_____)	___	4.	C	(_____)	___
	B	(_____)	___		A	(_____)	___
2.	C	(_____)	___	5.	D	(_____)	___
	D	(_____)	___		B	(_____)	___
3.	B	(_____)	___	6.	A	(_____)	___
	C	(_____)	___		D	(_____)	___

KEY

A –
B –
C –
D –

WORKSHEET A

PROGRAM RANKING FORM – FIVE PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies the selection criterion for this copy of Worksheet A.

Criterion: _____

1.	A	(_____)	___	6.	C	(_____)	___
	B	(_____)	___		A	(_____)	___
2.	C	(_____)	___	7.	D	(_____)	___
	D	(_____)	___		B	(_____)	___
3.	E	(_____)	___	8.	E	(_____)	___
	A	(_____)	___		C	(_____)	___
4.	B	(_____)	___	9.	A	(_____)	___
	C	(_____)	___		D	(_____)	___
5.	D	(_____)	___	10.	B	(_____)	___
	E	(_____)	___		E	(_____)	___

KEY

A –
B –
C –
D –
E –

WORKSHEET A

PROGRAM RANKING FORM – SIX PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies the selection criterion for this copy of Worksheet A.

Criterion: _____

1. D (_____) ___	6. D (_____) ___	11. B (_____) ___
B (_____) ___	A (_____) ___	C (_____) ___
2. C (_____) ___	7. F (_____) ___	12. D (_____) ___
A (_____) ___	C (_____) ___	F (_____) ___
3. B (_____) ___	8. A (_____) ___	13. A (_____) ___
E (_____) ___	B (_____) ___	E (_____) ___
4. A (_____) ___	9. C (_____) ___	14. F (_____) ___
F (_____) ___	D (_____) ___	B (_____) ___
5. E (_____) ___	10. E (_____) ___	15. E (_____) ___
C (_____) ___	F (_____) ___	D (_____) ___

KEY

A –
B –
C –
D –
E –
F –

WORKSHEET A

PROGRAM RANKING FORM – SEVEN PROGRAMS

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Using the key at the bottom of the page, identify each program by name or abbreviation in the parentheses identified by its code letter. Then, referring to your copies of Information Sheet 1 from Unit 3, check the program in each pair which better satisfies the selection criterion for this copy of Worksheet A.

Criterion: _____

1. D (_____) ___		8. B (_____) ___		15. G (_____) ___	
B (_____) ___		G (_____) ___		A (_____) ___	
2. F (_____) ___		9. D (_____) ___		16. B (_____) ___	
G (_____) ___		A (_____) ___		C (_____) ___	
3. C (_____) ___		10. F (_____) ___		17. D (_____) ___	
A (_____) ___		C (_____) ___		F (_____) ___	
4. B (_____) ___		11. G (_____) ___		18. A (_____) ___	
E (_____) ___		E (_____) ___		E (_____) ___	
5. G (_____) ___		12. A (_____) ___		19. C (_____) ___	
D (_____) ___		B (_____) ___		G (_____) ___	
6. A (_____) ___		13. C (_____) ___		20. F (_____) ___	
F (_____) ___		D (_____) ___		B (_____) ___	
7. E (_____) ___		14. E (_____) ___		21. E (_____) ___	
C (_____) ___		C (_____) ___		D (_____) ___	

KEY

A –
B –
C –
D –
E –
F –
G –

SUMMARIZING YOUR PROGRAM RANKINGS

When you have completed a copy of Worksheet A for each of your selection criteria, the paired rankings for each criterion should be summarized and checked for consistency. Refer to Example B on the following page as you read the following guidelines.

1. Fill in the criterion under consideration. (The criterion used in Example B was Appropriate Scope.)

2. Tally and total the number of times each program was checked on Worksheet A for this criterion.

3. Add these totals and enter the Grand Total at the bottom of that column. (In Example B, the Grand Total was 10.) This total should equal the number of paired comparisons on Worksheet A. If it does not, check your tallies and correct your figures.

4. In the "Ties" column check each program which has the same number of tallies as at least one other program. (In Example B, the METRIC and CHIMP Programs were both ranked as 3 while the NUMATH and FLAME Programs were both ranked as 1; therefore, all four programs were checked.)

5. Enter the Grand Total of "Ties" at the bottom of that column.

6. At the bottom of each sheet, indicate the extent of ranking inconsistencies by checking the appropriate space for your Grand Total of ties.

7. For each criterion on which no ties were recorded, list the programs in program rank order according to the number of tallies each received, e.g., the program with the highest number of tallies should be ranked first.

   For each criterion on which ties were recorded, skip this step for the moment. (In Example B on the following page, since four ties were recorded, the program rank order could not be indicated.)

EXAMPLE B

PROGRAM RANKING SUMMARY SHEET

Criterion: Appropriate Scope

Program	Tally	Total	Ties
A. METRIC	///	3	✓
B. NU-MATH	/	1	✓
C. CHIMP	///	3	✓
D. SIGMA	//	2	
E. FLAME	/	1	✓
F.			
G.			
Grand Total	X	10	4*

Program Rank Order

Order	Program
1st	
2nd	
3rd	
4th	
5th	
6th	
7th	

*Grand Total of "Ties"

0_____ (No inconsistencies)

3_____ (Few inconsistencies)

4__X__ (Moderate number of inconsistencies)

5_____ or more (Many inconsistencies)

Discussion of Ties

The significance of the problem of ties cannot be determined until all of the ties recorded by all group members have been taken into consideration. After each member of the group has completed all copies of Worksheet B, he/she should inform the Project Manager how many ties were recorded for each criterion.

The Project Manager will then have to decide whether ties represent a significant problem. In making such a decision, the following elements should be considered: the number of programs being compared, the number of people who recorded ties, the number of criteria where ties were recorded, and the extent of the inconsistencies involved. The situations detailed below provide a relative gauge that can be used to judge the significance of the problem.

No. of Programs	No. of Group Members	No. of Criteria	Extent of Inconsistencies
3 or 4	Half of the group	1/3 of the total	Any inconsistencies
5 to 7	Half of the group	1/3 of the total	Moderate inconsistencies

If ties were recorded in such a way that your situation is comparable to either of the situations detailed above, the problem of ties is significant. In other words, when three or four programs are involved, if more than half the group have reported any ranking inconsistencies for more than one third of the criteria, the problem is significant. Similarly, when five to seven programs are involved, if more than half of the group have reported moderate ranking inconsistencies for more than one third of the criteria, the problem is significant.

If the problem of ties is significant in terms of your situation, members of the group should work together to determine why this problem has been encountered. Two possible reasons for many ties, together with possible corrective action, are mentioned briefly below:

1. The information collected on the programs being compared is not adequate. If this is the case, more information is needed.

2. Some of the questions related to specific selection criteria are not detailed enough and were interpreted in different ways by the various members of the group. If this is the case, those questions should be clarified.

In Example C on the following page, the problem of ties has been resolved and the programs being considered have been listed in program rank order.

EXAMPLE C

PROGRAM RANKING SUMMARY SHEET

Criterion: Appropriate Scope

Program	Tally	Total	Ties
A. METRIC	////	4	
B. NU-MATH		0	
C. CHIMP	///	3	
D. SIGMA	//	2	
E. FLAME	/	1	
F.			
G.			
Grand Total	X	10	0*

Program Rank Order

Order	Program
1st	METRIC
2nd	CHIMP
3rd	SIGMA
4th	FLAME
5th	NU-MATH
6th	
7th	

*Grand Total of "Ties"

0 X (No inconsistencies)
3_____ (Few inconsistencies)
4_____ (Moderate number of inconsistencies)
5_____ or more (Many inconsistencies)

Complete Exercises 1 and 2 on the following pages to see how your paired rankings should be summarized.

EXERCISE 1

FRUIT RANKING

This exercise, although not too similar to curriculum selection, should give you some insights into the ranking procedures described in this unit. Indicate your preferences by checking the fruit in each pair which better satisfies the criterion indicated. Then, turn to the following page and summarize your responses.

FRUIT RANKING FORM

Criterion: **Preference for Eating**

1.	peach	____	6.	pear	____
	apple	____		peach	____
2.	pear	____	7.	orange	____
	orange	____		apple	____
3.	banana	____	8.	banana	____
	peach	____		pear	____
4.	apple	____	9.	peach	____
	pear	____		orange	____
5.	orange	____	10.	apple	____
	banana	____		banana	____

EXERCISE 2

FRUIT RANKING SUMMARY SHEET

Tally and total the number of times each fruit was checked on Exercise 1. Then check all of the fruits involved in a tie and total the number of ties. If no ties occurred, enter the fruits in rank order at the right – list the fruit with the highest number of tallies first. (If you have any ties, resolve the problem before filling in the fruit rank order.) When you have completed this exercise, turn to the following page and read the discussion of these exercises.

Criterion: Preference for Eating

Fruit	Tally	Total	Ties
A. Peach			
B. Apple			
C. Pear			
D. Orange			
E. Banana			
Grand Total			*

Fruit Rank Order

Order	Fruit
1st	
2nd	
3rd	
4th	
5th	

*Grand Total of "Ties"

0_____ (No inconsistencies)

3_____ (Few inconsistencies)

4_____ (Moderate number of inconsistencies)

5_____ or more (Many inconsistencies)

DISCUSSION OF EXERCISES 1 AND 2

There are no correct solutions to these exercises. A few criteria for proper completion of the two exercises are given below. Check your work against these criteria.

1. On the Fruit Ranking Form you should have checked only one fruit in each pair.

2. On the Fruit Ranking Summary Sheet your answer should meet the following requirements:
   a. The Grand Total for the "Total" column should be 10.
   b. If no ties were recorded, the fruit with the highest number of tallies should be ranked first, the second highest should be ranked second, and so forth.
   c. If any ties were recorded, the problem should have been resolved before the fruit rank order was indicated.

You are now ready to summarize the rankings of the alternative curriculum programs from your completed copies of Worksheet A. Your Project Manager will supply you with a copy of Worksheet B for each of your selection criteria. You will also need all of your completed copies of Worksheet A.

WORKSHEET B

PROGRAM RANKING SUMMARY SHEET

Use one copy of this worksheet for each of your selection criteria. On each worksheet indicate the criterion being considered. Tally and total the number of times each program was checked on your copy of Worksheet A for this criterion. Check all programs involved in a tie and total the number of ties. If there were no ties, indicate the rank order of the programs being considered at the right. If some ties were recorded, resolve the problem before filling in the rank order at the right.

Criterion: _____

Program	Tally	Total	Ties
A.			
B.			
C.			
D.			
E.			
F.			
G.			
Grand Total			

Program Rank Order

Order	Program
1st	
2nd	
3rd	
4th	
5th	
6th	
7th	

*Grand Total of "Ties"

0_____(No inconsistencies)

3_____ (Few inconsistencies)

4_____ (Moderate number of inconsistencies)

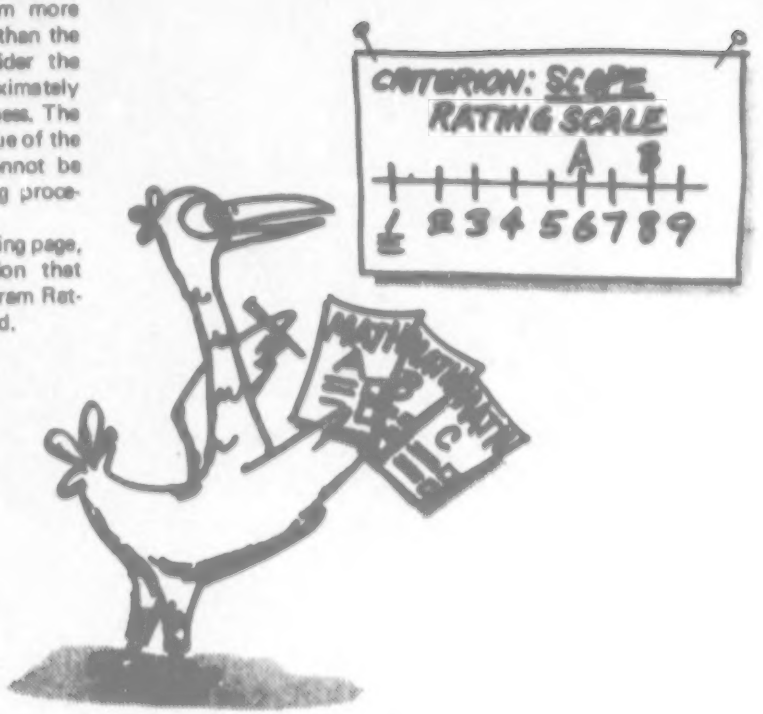
5_____ or more (Many inconsistencies)

RATING PROGRAMS

After the program rank order has been completed for each selection criterion, you are ready to rate these programs. In rating the programs, you can clarify the extent to which each program satisfies each of the selection criteria. These relative program ratings are important since one program may be much more or less appropriate than another program which was ranked immediately above or below it for a particular criterion.

For example, the five mathematics programs being compared in Examples A, B, and C were ranked as follows: 1st, METRIC; 2nd, CHIMP; 3rd, SIGMA; 4th, FLAME; 5th, NU-MATH. In terms of relative appropriateness, however, the person who recorded these program rankings might consider the CHIMP Program more like the NU-MATH Program than the METRIC Program and consider the other two programs approximately equivalent in value or usefulness. The relative appropriateness or value of the programs being compared cannot be specified by a simple ranking procedure.

Example D on the following page, together with the explanation that follows, shows how your Program Rating Forms should be completed.



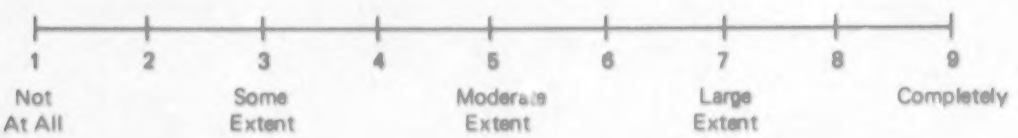
EXAMPLE D

PROGRAM RATING FORM

Use one copy of this worksheet for each of your selection criteria. On each worksheet, fill in the criterion being considered and the program rank order from your copy of Worksheet B for this criterion. As a group, *decide what the highest rating assigned should be for this criterion and fill in that rating for the first program you have listed. Then rate each of the other programs listed, indicating the extent to which it satisfies this criterion. As you go down your list, be sure that each program is given a numerical rating which is equal to or lower than the rating given to the preceding program.*

Criterion: **Appropriate Scope**

Extent to which each program satisfies this criterion:



Program Rank Order	Rating
1. METRIC	9
2. CHIMP	8
3. SIGMA	8
4. FLAME	5
5. NU-MATH	2
6.	
7.	

In Example D, members of the group decided that the METRIC Program covered all of the important topic areas associated with the criterion Appropriate Scope and rated the program 9 on this criterion. This rating (9) provides a common reference point for goup members to use in rating the other programs being considered.

The group member who completed Example D rated the CHIMP Program as 8, since with one exception the program satisifed the criterion listed. Since the SIGMA Program was also satisfactory, with one exception, it also was rated 8. The FLAME Program only covered about half of the desired topics, so it was rated 5. Finally, the NU-MATH Program, which covered very few of the relevant topics, was rated 2.

Remember, although you may give the same rating to more than one program, no program should be given a rating higher than the rating for the preceding program.

Your Project Manager will provide each member of your group with a copy of Worksheet C for each of your selection criteria. Worksheet C can be used to rate the programs being considered for all selection criteria except *Reasonable Cost. Do not complete a copy of Worksheet C for the selection criterion Reasonable Cost; separate instructions and a slightly different worksheet are needed to rate the extent to which the programs being considered satisfy this criterion.*

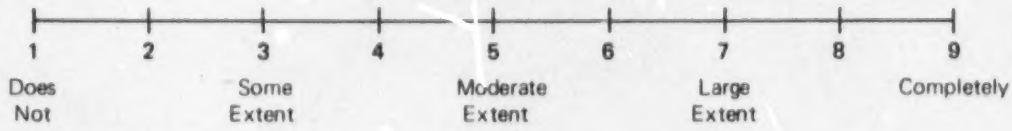
WORKSHEET C

PROGRAM RATING FORM

Use one copy of this worksheet for each of your selection criteria. On each worksheet, fill in the criterion being considered and the program rank order from your copy of Worksheet B for this criterion. As a group, *decide what the highest rating assigned should be for this criterion and fill in that rating for the first program you have listed. Then rate each of the other programs listed, indicating the extent to which it satisfies this criterion. As you go down your list, be sure that each program is given a numerical rating which is equal to or lower than the rating given to the preceding program.*

Criterion: _____

Extent to which each program satisfies this criterion:



Program Ratings

Program Rank Order	Rating
1. _____	____
2. _____	____
3. _____	____
4. _____	____
5. _____	____
6. _____	____
7. _____	____

If Reasonable Cost is one of your selection criteria, continue reading. Otherwise, turn to page 4-24.

Program Rating Form for Reasonable Cost

Since program ratings are assigned differently for the criterion Reasonable Cost than are the ratings for other selection criteria, a special Program Rating Form is needed. In rating various programs on this criterion, the higher scale values are assigned to programs which cost less than the current program.

Again, a nine-point rating scale is used (see Example E on the following page). Since the costs for new programs usually exceed those for current programs, a rating of 7 is assigned to any programs which cost the same as the current program.

The following guidelines explain how this form should be completed.

1. Working together, your group should agree on the cost interval to be used and insert the appropriate figures in the blanks immediately below the odd ratings on the scale. In Example E, the interval $2,000 is used. (Note that the figure provided for rating 7 is zero, which means the same as current program costs.)

2. List the programs in rank order from your copy of Worksheet B for this criterion.

3. Fill in the cost estimate for each program. Your Project Manager will supply this information. Remember, these estimates show cost **differences** between the alternative programs being compared and the current program.

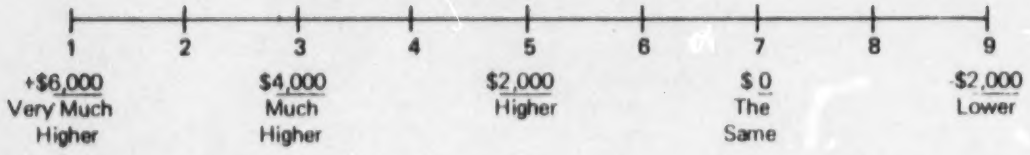
4. Rate each of the programs listed according to the cost interval your group has established.

EXAMPLE E

PROGRAM RATING FORM FOR REASONABLE COST

As a group, decide what cost interval to use and fill in the appropriate figures below 1, 3, 5, and 9 on the rating scale. List the programs in rank order from your copy of Worksheet B for this criterion. Get the cost information from your Project Manager and fill in the cost difference for each program. Then assign a rating to each of the programs listed.

Relative Costs of Programs Being Considered as Compared to Current Program Costs:



Program Rank Order	Cost Difference	Rating
1. METRIC	+$3,420	4
2. CHIMP	+$4,180	3
3. SIGMA	-$1,360	8
4. FLAME	+$3,100	4
5. NU-MATH	$ None	7
6.	$	
7.	$	

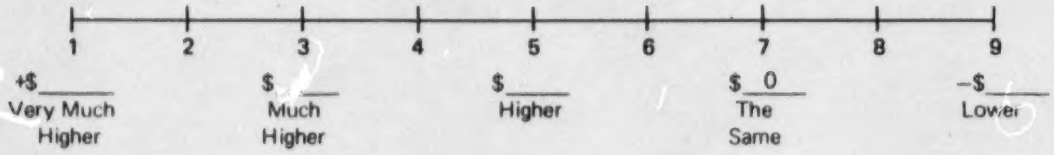
Use Worksheet D on the following page to rate the programs being considered in terms of the criterion Reasonable Cost.

WORKSHEET D

PROGRAM RATING FORM FOR REASONABLE COST

As a group, decide what cost interval to use and fill in the appropriate figures below 1, 3, 5, and 9 on the rating scale. List the programs in rank order from your copy of Worksheet B for this criterion. Get the cost information from your Project Manager and fill in the cost difference for each program. Then assign a rating to each of the programs listed.

Relative Costs of Programs Being Considered as Compared to Current Program Costs:



Program Rank Order	Cost Difference	Rating
1. _____	$_____	____
2. _____	$_____	____
3. _____	$_____	____
4. _____	$_____	____
5. _____	$_____	____
6. _____	$_____	____
7. _____	$_____	____

SUMMARIZING INDIVIDUAL RATINGS

After you have finished rating all of the programs being compared for each selection criterion, all of your ratings should be combined on the Individual Rating Summary Sheet on the following page (Worksheet E).

In order to facilitate the summarizing of your group ratings, everyone in your group should list **all of the programs** being considered and **all of the selection criteria in the same order on Worksheet E.**

The following guidelines explain how your individual ratings should be summarized.

1. Fill in your name.
2. List the programs in the order agreed upon by your group.
3. List the criteria in the order agreed upon by your group.
4. From your copies of Worksheets C and D, enter your ratings for each program for each of the selection criteria listed.

WORKSHEET E

INDIVIDUAL RATING SUMMARY SHEET

Name: _____

PROGRAM	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1.															
2.															
3.															
4.															
5.															
6.															
7.															

Make sure that a completed copy of this worksheet has been submitted to your Project Manager.

If you are responsible for preparing the summarized group ratings, continue reading. Otherwise, turn to page 4-33.

SUMMARIZING GROUP RATINGS

When all of the copies of Worksheet E have been collected, you are ready to complete a Group Rating Summary Sheet for each of the programs being compared. This summary will provide final group ratings for all of the programs. These ratings, in turn, provide information that local decision makers can use in deciding which of the alternative programs would be most appropriate for your school. The higher the final rating is, the better a given program would be.

To simplify this step, you should enter all of the information which applies to all programs on Information Sheet 1. Then, make a copy of Information Sheet 1 for every program being considered. Information which applies to **all** of the programs being compared is detailed below.

1. The **number of people** (group members) who rated the programs.

2. The **selection criteria** (in the same order they were listed on Worksheet E).

3. The **average criterion ratings** recorded on Information Sheet 1 in Unit 2. (Optional)

   Now, refer to Information Sheet 1 from Unit 2 to find the **average criterion ratings** for your final selection criteria. If these average ratings were spread over four or more rating values (e.g., 4 to 7 or 5 to 9), they can be rounded and enterd in the **Average Criterion Rating** row. **If this is the case, use Information Sheet 1A.**

   If, on the other hand, these average ratings were very close in numerical value (e.g., between 5 and 7 or between 6 and 8), these averages should not be used. **If this is the case, use Information Sheet 1B.**

Example F on page 4-27 shows how the information detailed above should be entered on Information Sheet 1 before copies of this sheet are made for all of the programs being compared.

EXAMPLE F

GROUP RATING SUMMARY SHEET

Program: _____

Number of Group Member Rating this Program: 5

GROUP MEMBER	A. Clear Objectives	B. Appropriate Scope	C. Logical Sequence	D. Varied Learning Activities	E. Extent of Individualization	F. Provision for Staff Training	G. Reasonable Cost	H. Availability of Formal Evaluation Findings	I. Lack of Bias	J.	K.	L.	M.	N.	O.	
David																
Sally																
Ted																
Carol																
Richard																
PROGRAM RATING																
AVERAGE CRITERION RATING	9	7	6	5	2	2	7	3	4							
MODIFIED PROGRAM RATING																

If you have decided to use Information Sheet 1A, turn to the following page. If you are going to use Information Sheet 1B, turn to page 4-29.

INFORMATION SHEET 1A

GROUP RATING SUMMARY SHEET

Refer to the foregoing example and fill in as much information as possible before making a copy of this information sheet for each of the programs being compared. Before ***completing these sheets from your copies of Worksheet E, refer to the guidelines on page 4-30.***

Program: _____

Number of Group Members Rating this Program: ☐

GROUP MEMBER	SELECTION CRITERION A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	TOTAL
				2												
PROGRAM RATING																
AVERAGE CRITERION RATING																
MODIFIED PROGRAM RATING																GRAND TOTAL
																AVERAGE RATING*

*Average Rating equals Grand Total divided by the number of members times the Total average criterion rating.

When completed, all copies of this information sheet should be submitted to your Project Manager.

INFORMATION SHEET 18

GROUP RATING SUMMARY SHEET

Refer to the foregoing example and fill in as much information as possible before making a copy of this information sheet for each of the programs being compared. Before ***completing these sheets from your copies of Worksheet E, refer to the guidelines on the following page.***

Program: _____

Number of Group Members Rating this Program: ☐

GROUP MEMBER	SELECTION CRITERION A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.	O.	
PROGRAM RATING																GRAND TOTAL
																AVERAGE RATING*

*Average Rating equals Grand Total divided by the number of group members times the number of selection criteria.

When completed, all copies of this information sheet should be submitted to your Project Manager.

As soon as you have a copy of Information Sheet 1 (partially completed) for each program, follow the guidelines below as you complete each copy. (Examples G and H on the following pages illustrate how the procedures described below apply to Information Sheets 1A and 1B respectively.)

1. Fill in the name of the program. (Example G was prepared for the METRIC Program.)

2. Fill in each group member's ratings by criterion for this program from Worksheet E. (In Example G, David's criterion ratings for the METRIC Program were: 7, 9, 5, 8, 6, 5, 5, 6, 6.)

3. Total all of the ratings for each **Selection Criterion** and fill in the **Program Rating.** In Example G, the Program Rating for criterion A, Clear Objectives, is 34 (7+7+7+6+7).

4. Total all of the program ratings across criteria. In Example G, the program ratings total 281 (34 + 37 + 28 + 36 + 32 + 18 + 25 + 38 + 33). If you filled in Average Criterion Ratings, multiply each Program Rating by the Average Criterion Rating and enter your answer below. Your answer provides the **Modified Program Rating** for each criterion. In Example G, the modified program rating for the criterion Clear Objectives is 306 (34x9).

   Total the modified program ratings across criteria. In Example G, the modified program ratings total 1698. To calculate the average rating for this program, divide the Grand Total by the number of group members times the total average criterion rating.

5. If you did not complete the Average Criterion Ratings, refer to Example H. In this case, calculate the average rating for this program by dividing the **Grand Total** (281) by the number of group members times the number of selection criteria.

EXAMPLE G

GROUP RATING SUMMARY SHEET

Program: METRIC

Number of Group Members Rating this Program: 5

GROUP MEMBER	A. Clear Objectives	B. Appropriate Scope	C. Logical Sequence	D. Varied Learning Activities	E. Extent of Individualization	F. Provision for Staff Training	G. Reasonable Cost	H. Availability of Formal Evaluation Findings	I. Lack of Bias	J.	K.	L.	M.	N.	O.	TOTAL
David	7	9	5	8	6	5	5	6	6							
Sally	7	8	8	8	7	6	5	9	5							
Ted	7	5	4	5	6	3	5	8	7							
Carol	6	9	6	9	8	3	5	8	7							
Richard	7	6	5	6	5	1	5	7	8							
PROGRAM RATING	34	37	28	36	32	18	28	38	33							281
AVERAGE CRITERION RATING	9	7	6	5	8	6	7	3	4							55
MODIFIED PROGRAM RATING	306	259	168	180	256	108	175	114	132							GRAND TOTAL 1698
																AVERAGE RATING* 6.2

*Average Rating equals Grand Total divided by the number of members times the Total average criterion rating (1698 ÷ 275 = 6.2).

After studying this example, complete your copies of Information Sheet 1 for each of the programs being considered.

EXAMPLE H

GROUP RATING SUMMARY SHEET

Program: METRIC

Number of Group Members Rating this Program: 5

GROUP MEMBER	SELECTION CRITERION A. Clear Objectives	B. Appropriate Scope	C. Logical Sequence	D. Varied Learning Activities	E. Extent of Individualization	F. Provision for Staff Training	G. Reasonable Cost	H. Availability of Formal Evaluation Findings	I. Lack of Bias	J.	K.	L.	M.	N.	O.	
David	7	9	5	8	6	5	5	6	6							
Sally	7	8	8	8	7	6	5	9	5							
Ted	7	5	4	5	6	3	5	8	7							
Carol	6	9	6	9	8	3	5	8	7							
Richard	7	6	5	6	5	1	5	7	8							
PROGRAM RATING	34	37	28	36	32	18	25	38	33							281
																6.2

GRAND TOTAL

AVERAGE RATING*

*Average Rating equals Grand Total divided by the number of group members times the number of selection criteria (281 ÷ 45 = 6.2).

After studying this example, complete your copies of Information Sheet 1 for each of the programs being considered.

SELECTING A CURRICULUM PROGRAM

By this time you should have the final group ratings for all of the programs being compared. The program with the highest rating is supposed to be the most appropriate program which should be selected for adoption.

The following section provides information you may find helpful in recommending a curriculum program for adoption or adaptation in your district. The final selection decision may be made by your entire group, your Project Manager, or some other administrator in your school district. Whoever will make the final decision, a few guidelines may be helpful.

The final selection of a curriculum program is usually based on a comparison of the final group ratings given to each of the programs being considered as well as the consideration of any other factors which may not have been included in the selection criteria established.

The alternative program with the highest group rating is probably the most appropriate of the alternative programs which were analyzed in terms of the cost and effectiveness information you collected. Usually, that program will represent a compromise among the various alternative programs which were compared. Each of these programs may be better in some ways than the other programs which were analyzed, but one of those programs received the highest rating in terms of all of the selection criteria established. Still, this rating only implies a final decision. Other very important considerations may affect the ultimate selection of a program.

Some of the factors the decision makers should consider are:

1. Any unexpected constraints. Unexpected budgetary constraints which make it impossible to implement a given program could arise while the group members were comparing alternative curriculum programs. Or, a strong community organization might demand that any program selected provide for the participation of community volunteers in the instructional process.

2. The current program might turn out to be a close second to the most highly rated alternative program. In a case like this, the decision makers might feel that whatever small improvements the new program could provide would not offset the difficulties, general disruption, and other problems often associated with implementing a new program.

3. Assessing the possible adverse consequences of the most appropriate alternative program. An experienced decision maker could consider the possible adverse consequences of each of the two or three most appropriate alternative programs by visualizing each of them in operation. Considering each alternative program separately, he would ask himself, "What could go wrong?" in terms of current practices in the school system and considering factors such as staff motivation and skills, instructional processes and structure, student reactions, adaptability and flexibility of equipment and facilities, compatibility of formal and informal procedures, and district goals, policies, etc. Then he would consider various problems that might arise — how serious each problem is, the possible causes of each problem, how to prevent such problems from arising, and how the most serious potential problems could be handled.

After considering the foregoing factors, you can understand why the program you initially considered most appropriate for your school might not be the best choice after all; if this is the case, the decision makers may select the program with the second best rating. Whatever reasons affect the final selection of a program, those reasons should be communicated to all members of the group who analyzed and compared the alternative curriculum programs being considered.

DOCUMENTING THE SELECTION OF A CURRICULUM PROGRAM

Whichever program is finally selected, be sure to document the final decision. Your report should include information on the curriculum change desired, the screening and selection criteria used, the work of the group who analyzed the alternative programs together with the results of their analysis, any recommendation/decision made by this group, and the reasons for their recommendation/decision. This information can easily be gathered and presented in the form of a short report. A brief suggested outline for such a report is presented on the following page.

SUGGESTED OUTLINE FOR A CURRICULUM SELECTION REPORT

I. Introduction

- A. Statement of the Purpose of the Report
- B. Outline of the Report

II. Procedures

- A. Identification of the Curriculum Selection Committee
- B. Statement of the Desired Curriculum Change
- C. Description of the Screening Criteria Used
- D. Identification of Suitable Alternative Programs
- E. Description of the Selection Criteria Used
- F. Description of the Information Collected
- G. Description of the Ranking and Rating of Programs

III. Results and Recommendations

- A. Presentation of Program Rating Results
- B. Recommendations on the Selection of a Program

IV. Appendix

- A. Selection Criteria Information by Program (Information Sheet 1, Unit 3)
- B. Summary Cost Estimate Sheet (Information Sheet 3, Unit 3)
- C. Group Rating Summary Sheet (Information Sheet 1, Unit 4)

Preparing your curriculum selection report is the final task your group and your Project Manager need to perform. Once a decision to adopt or adapt a specific curriculum program has been made, it will be necessary to develop a plan for implementing that program and possibly a proposal for securing any resources needed. The Administering for Change Program of Research for Better Schools, Inc., can supply training materials designed to assist school personnel interested in performing these tasks.

APPENDIX

PROJECT MANAGER'S GUIDE

For use by the Project Manager. It is strongly recommended that you read the entire handbook carefully before reading this Appendix.

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ROLE OF THE PROJECT MANAGER

The role of the Project Manager as described here should be viewed as specific to this project alone. In this handbook, the Project Manager is the person responsible for the overall efforts of the curriculum selection group. As Project Manager, you are responsible for the successful completion of this project and each of the tasks involved.

Your role as Project Manager involves four activities: initiating, coordinating, monitoring, and documenting.

Initiating refers to the process of getting the project under way. Specifically, this involves: selecting the members of the group, preparing budget and time estimates, and planning and organizing the first meeting.

Coordinating simply means seeing that all of the different tasks and functions are performed on time. This requires careful timing and use of personnel, space, and materials for each specific task.

Monitoring refers to insuring that each task is performed properly.

Documenting refers to organizing the appropriate materials, i.e., the worksheets and information sheets completed, and writing a concise but comprehensive report on the curriculum selection process and conclusions. This information provides a basis upon which the appropriate decision maker(s) can base a final decision and provides information on the reasons a given curriculum program was selected.

TIME ESTIMATES

All of the major activities described in this handbook are listed by unit on the chart below.

For each task, **instructional** and **implementation** time estimates are provided together with a **total** time estimate for completing the tasks outlined in each unit. **Instructional** time is the time required to go through the material provided on each specific task; **implementation** time refers to the time required to carry out a specific task; and the **unit total** is the total time required to complete the tasks related to each unit.

Unit	Task	Time Estimate		
		Instructional	Implementation	Unit Total
1	a. Formulating a program goal statement	¼ hr.	½ hr.	
	b. Defining screening criteria	¼ hr.	¼ hr.	
	c. Identifying suitable programs	¼ hr.	1 hr.	2½ hrs.*
2	a. Developing selection criteria	1 hr.	1 hr.	
	b. Determining which selection criteria to use	½ hr.	½ hr.	3 hrs.
3	a. Gathering information on cost and effectiveness	½ hr.	10-20 hrs.**	10½ to 21½ hrs.
	b. Estimating program costs (optional)	(1 hr.)		
4	a. Comparing alternative curriculum programs	2 hrs.	1½ hrs.	
	b. Selecting a curriculum program	¼ hr.	1¼ hrs.	5 hrs.
	Total Time Estimates	5-6 hrs.	16-26 hrs.	21-32 hrs.

*The three time estimates provided for Unit 1 are based on the assumption that these planning tasks have already been performed. If these tasks have not been performed, a few hours should be added to the time estimates for Unit 1.

**The implementation time estimated for the first task performed in Unit 3 will vary depending upon the number of selection criteria being used and the number of alternative programs being considered.

COST ESTIMATES

Various costs may be associated with this project. As Project Manager, you should estimate these costs in advance and request district approval of your proposed budget (i.e., your total cost estimate). If your proposed budget is approved in advance, you will be able to implement the project more smoothly.

The budget sheet on the following page has been provided to enable you to estimate project costs by unit. The cost categories used in the budget sheet are defined below.

Personnel. This category includes all district professional and clerical personnel who will be involved in this project.

Materials & Supplies. This category includes any books, documents, references, stationery, typing supplies, etc., that will be needed.

Equipment. This category includes audiovisual aids, furniture, or other equipment that may be needed.

Reproduction. This category includes reproduction costs for any information needed for all group members.

Travel. This category includes costs for visits to developers, publishers, libraries, demonstrations, conferences, or workshops for the purpose of collecting information for the project.

Purchased Services. This category includes all services rendered by any personnel who are not employed by the district.

Other. This category includes any expenses that are not related to any of the foregoing categories.

Use the budget sheet on the following page to estimate the costs of your project.

BUDGET SHEET

Use this sheet to estimate the costs for each cost category by unit and the total cost for the entire project. Consider each task involved in each unit and try to estimate the costs involved in performing each task.

Unit 1 (3 Tasks)	Cost Category		Estimated Cost
Identifying Goals, Screening Criteria, and Programs	Personnel Materials and Supplies Equipment Reproduction Travel Purchased Services Other	Total	$ _____
Unit 2 (2 Tasks)			
Establishing Selection Criteria	Personnel Materials and Supplies Equipment Reproduction Other	Total	$ _____
Unit 3 (1 or 2 Tasks)			
Analyzing Alternative Programs	Personnel Materials and Supplies Equipment Reproduction Travel Purchased Services Other	Total	$ _____
Unit 4 (2 Tasks)			
Comparing Alternatives and Selecting a Program	Personnel Materials and Supplies Equipment Reproduction Other	Total	$ _____
		GRAND TOTAL	$ _____

PROCEDURES AND CHECKLISTS

Having prepared the time and cost estimates for your cost-effectiveness project and obtained the necessary approvals from district administrators, you may begin to plan the actual project.

The following tasks should be performed before you begin to carry out your project:

1. Organize a curriculum selection group. Although this selection process can be carried out by a single individual, it is strongly recommended that it be undertaken by a group. The group should include approximately six people – teachers or curriculum coordinators for the subject area involved, principals, and central office administrators.

2. Obtain a copy of this handbook for each member of the group.

3. Find a meeting place and schedule a series of meetings.

4. Make sure that the Business Manager is prepared to release funds, the support personnel involved, etc., for this project when they are needed.

5. Obtain whatever materials, supplies, stationery, equipment, etc., that will be needed.

6. Finally, read through the checklists on the following pages carefully. Refer to the corresponding information in each unit when necessary. These checklists are designed to: (a) remind you of activities that should be performed **BEFORE, DURING,** and **AFTER** the tasks covered in each unit are performed and (b) enable you to check each activity as it is performed (spaces are provided in the proper squence).

CHECKLIST FOR UNIT 1

IDENTIFYING GOALS, SCREENING CRITERIA, AND PROGRAMS

A. BEFORE Undertaking these Tasks

1. _____ If no preliminary work has been done in terms of analyzing your current situation, setting goals, identifying screening criteria, or identifying suitable programs, go directly to the DURING section of this checklist.

2. _____ If the preliminary work has been done on the tasks mentioned above, the Project Manager should provide the group members with summarized information to be entered on the worksheet and information sheets listed below. If this is the case, go directly to the AFTER section of this checklist.

   a. _____ Worksheet A – Description of Current Situation

   b. _____ Information Sheet 1 – Program Goal Statement

   c. _____ Information Sheet 2 – List of Screening Criteria

   d. _____ Information Sheet 3 – List of Suitable Programs

B. DURING the Performance of these Tasks

1. _____ All members of the group, working together, complete Worksheet A. (Optional)

2. _____ All members of the group, working together, complete Information Sheet 1.

3. _____ All members of the group, working together, complete Information Sheet 2.

4. _____ All members of the group, working together, complete Information Sheet 3.

5. _____ The Project Manager collects the copies of Information Sheets 1, 2, and 3 completed by the group.

C. AFTER the Completion of these Tasks

1. _____ The Project Manager provides each group member with completed copies of Information Sheets 1, 2, and 3.

CHECKLIST FOR UNIT 2

ESTABLISHING SELECTION CRITERIA

A. BEFORE Undertaking these Tasks

1. ____ The Project Manager assigns one member of the group to summarize the initial ratings of the selection criteria (Worksheet B) as well as the final ratings (Worksheet D) when the individual ratings are completed.

B. DURING the Performance of these Tasks

1. ____ For Worksheet A – Initial Rating of Selection Criteria:

   a. ____ Each member of the group completes this worksheet independently.

   b. ____ The Project Manager collects all copies of Worksheet A and gives them to the member of the group who is to summarize the initial ratings.

2. ____ For Worksheet B – Summarizing Initial Ratings:

   a. ____ The member of the group who summarized the initial ratings completes this worksheet and submits it to the Project Manager.

   b. ____ The Project Manager provides each group member with a copy of Worksheet B.

   c. ____ All Members of the group discuss the summary of the initial ratings.

3. ____ For Worksheet C – Final Rating of Selection Criteria:

   a. ____ Each member of the group completes this worksheet independently.

   b. ____ The Project Manager collects all copies of Worksheet C and gives them to the member of the group who is to summarize the final ratings.

4. ____ For Worksheet D – Summarizing Final Ratings:

   a. ____ The member of the group who summarized the final ratings completes this worksheet and submits it to the Project Manager.

   b. ____ The Project Manager provides each group member with a copy of Worksheet D.

   c. ____ All members of the group discuss the summary of the final ratings.

5. ____ For Information Sheet 1 – List of Final Selection Criteria:

   a. ____ All members of the group, working together, complete Information Sheet 1 and submit all copies to the Project Manager.

C. AFTER the Completion of these Tasks

1. ____ The Project Manager provides each group member with a completed copy of Information Sheet 1.

CHECKLIST FOR UNIT 3

ANALYZING ALTERNATIVE PROGRAMS

A. BEFORE Undertaking these Tasks

1. ____ The Project Manager provides group members with a copy of Information Sheet 1 (Selection Criteria Information by Program) for each of the programs being considered.

2. ____ *The Project Manager provides enough copies of Information Sheet 2 (Cost Estimate Sheet) for each of the programs being considered, if Reasonable Cost is one of your selection criteria.

3. ____ *The Project Manager assigns at least one member of the group to read the section on Procedures For Estimating Program Costs and complete Information Sheets 2 and 3.

B. DURING the Performance of these Tasks

1. ____ For Information Sheet 1 – Selection Criteria Information By Program:

   a. ____ Members of the group gather information on each of the alternative programs.

   b. ____ Members of the group complete a copy of Information Sheet 1 for each program being considered and submit all copies to the Project Manager.

2. ____ *For Information Sheet 2 – Cost Estimate Sheet for Alternative Curriculum Program:

   a. ____ The designated group member(s) read the section on estimating program costs and advise other group members what kinds of cost information are needed to complete a copy of Information Sheet 2 for each program.

   b. ____ The designated group member(s) complete a copy of Information Sheet 2 for each program being considered—using the information supplied by other group members—and submit all copies to the Project Manager.

3. ____ *For Information Sheet 3 – Summary Cost Estimate Sheet:

   a. ____ The designated group member(s) complete Information Sheet 3 and submit it to the Project Manager.

C. AFTER the Completion of these Tasks

1. ____ The Project Manager provides each group member with copies of completed Information Sheets 1 and 3 (optional).

*These activities will only be needed if Reasonable Cost is one of your selection criteria.

CHECKLIST FOR UNIT 4

COMPARING ALTERNATIVES AND SELECTING A PROGRAM

A. BEFORE Undertaking these Tasks

1. ____ The Project Manager chooses the appropriate copy of Worksheet A (Program Ranking Form) for the number of programs being considered from the alternative forms provided.

   a. ____ The Project Manager assigns a code letter to each of the programs being compared and completes the key at the bottom of the form.

   b. ____ The Project Manager provides each group member with a copy of Worksheet A for each of the selection criteria established.

2. ____ The Project Manager provides each group member with a copy of Worksheet B (Program Ranking Summary Sheet) for each of the selection criteria established.

3. ____ The Project Manager provides each group member with a copy of Worksheet C (Program Rating Form) for each of the selection criteria established.

4. ____ The Project Manager assigns one member of the group to complete a copy of Information Sheet 1 (Group Rating Summary Sheet) for each of the programs being considered.

B. DURING the Performance of these Tasks

1. ____ For Worksheet A – Program Ranking Form:

   a. ____ Each member of the group completes a copy of Worksheet A for each of the selection criteria established.

2. ____ For Worksheets B – Program Ranking Summary Sheet:

   a. ____ Each member of the group summarizes his/her rankings for each selection criterion on copies of Worksheet B.

   b. ____ After summarizing all rankings, each group member should immediately inform the Project Manager of the number of ties recorded for each criterion.

   c. ____ The Project Manager determines, on the basis of the number of ties recorded, the significance of the problem and seeks to resolve it.

   d. ____ After the problem of ties has been resolved, each member of the group fills in the Program Rank Order on each copy of Worksheet B.

3. ____ For Worksheet C – Program Rating Form:

   a. ____ All members of the group, working together, determine the highest rating to be assigned to each of the selection criteria established.

   b. ____ Each member of the group completes a copy of Worksheet C for each of the selection criteria established.

4. ____ For Worksheet D – Program Rating form (for Reasonable Cost):

   a. ____ Referring to the program cost estimates (from Unit 3), all members of the group, working together, complete this worksheet.

   b. ____ The Project Manager provides each group member a completed copy of Worksheet D.

CHECKLIST FOR UNIT 4 (Continued)

COMPARING ALTERNATIVES AND SELECTING A PROGRAM

B. DURING (continued)

5. _____For Worksheet E – Individual Rating Summary Sheet:

   a. ____ All members of the group, working together, determine the order in which the alternative programs and the selection criteria are to be listed on this worksheet.

   b. ____ Each member of the group completes his/her copy of Worksheet E.

   c. ____ The Project Manager collects all completed copies of Worksheet E.

6. _____For Information Sheet 1 – Group Rating Summary Sheet:

   a. ____ The designated group member completes a copy of Information Sheet 1 for each program being considered and submits all copies to the Project Manager.

   b. ____ The Project Manager provides each group member with a completed copy of Information Sheet 1 for each program being considered.

   c. ____ All members of the group, working together, make their final selection of a program on the basis of their completed copies of Information Sheet 1.

C. AFTER the Completion of these Tasks

1. _____The Project Manager is responsible for preparing a final report on the curriculum program selection project.